



REPORT
ON THE
SANITARY CONDITION
OF THE
County Borough
OF
Birkenhead,
FOR THE YEAR 1914,

BY

R. SYDNEY MARSDEN,

M.B., D.Sc., Ch.M., D.P.H., F.R.S. (Edin.), M.R.I.A., F.I.C.,
Hon. L.A.H. (Dublin).

Medical Officer of Health; School Medical Officer; Medical Officer to
the Mental Deficiency Committee; Supervising Tuberculosis Officer;
Physician and Superintendent to the Fever and Smallpox Hospitals, &c.

BIRKENHEAD:

WILLMER BROS. & Co., LTD., 64/68, CHESTER STREET.

1915.



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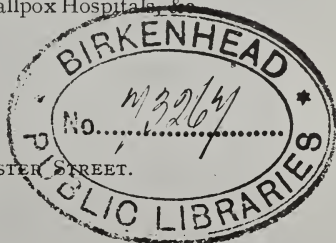
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HEALTH COMMITTEE

OF THE

BIRKENHEAD TOWN COUNCIL,

1914-1915.

||‡§†*MR. ALDERMAN E. G. MASON, J.P., CHAIRMAN.

||‡§†*MR. ALDERMAN THOMAS SHAW, DEPUTY-CHAIRMAN.

H‡§†*MR. ALDERMAN MICHAEL BYRNE.

||‡*MR. ALDERMAN FREDERICK NAYLOR, J.P.

MR. COUNCILLOR JAMES ASPINALL.

§MR. COUNCILLOR W. M. CAMPBELL.

MR. COUNCILLOR M. M. FORSYTHE.

||‡§†*MR. COUNCILLOR ROBERT FRAME.

§MR. COUNCILLOR WILLIAM JACKSON, J.P.

†*MR. COUNCILLOR W. W. KELLY.

MR. COUNCILLOR DAVID MACIVER.

§MR. COUNCILLOR FRANK TWEEDLE.

§MR. COUNCILLOR JOHN PLATT.

†§MR. COUNCILLOR DAVID ROGER ROWLANDS.

AND

HIS WORSHIP THE MAYOR

(A. H. ARKLE, Esq., J.P.).

Day of Meeting every alternate Tuesday at 4 p.m.

- Members of the Health Sub-Committee.
- † Members of the Hospital Sub-Committee.
- § Members of the Housing Sub-Committee.
- ‡ Members of the Shops Act—Sub-Committee.
- || Members of the Dispensary and Sanatorium Sub-Committee.

SS. B.C. V 145	<div style="text-align: right; font-size: 1.2em;">M/G</div>

Officials of the Public Health Department, 1914.

Medical Officer of Health and Supervising Tuberculosis Officer.

R. SYDNEY MARSDEN, M.B., D.Sc. (Chem. & Physics),
Ch.M., D.P.H., F.Inst.Chem., F.R.S. (Ed.),
M.R.I.A., Hon. L.A.H. (Dublin)., &c.

Tuberculosis Officer and Assistant M.O.H.

CYRIL BANKS, M.B., B.Surg. (Lond.), D.P.H.

Borough Bacteriologist.

PROFESSOR E. M. BEATTIE, M.D., Ch.M. (Edin.), M.A.,
University of Liverpool.

Borough Analyst.

HERBERT E. DAVIES, M.A. (Cantab.), B.Sc. (Lond.),
F.Inst.Chem.

Chief Inspector and Inspector under the Food and Drugs Act.

*WILLIAM DAWSON, ASSOC. SAN. INST.

Chief Clerk.

JOSEPH BENNETT.

Statistical Clerk.

JOHN OWEN.

Junior Clerks.

JOHN R. KNOWLES, R. E. JONES, E. P. ROGERS, ALICE JONES.

Inspector of Meat, Fish, and Slaughter Houses.

*JOHN M. CARNIE.

Assistant.

A. CARNIE.

Inspector of Housing.

*A. LONGSTAFF.

District Sanitary Inspectors.

*JOHN LEE.

*H. T. TAYLOR.

*W. H. TILSTON.

*JOSEPH CROSHAW.

Inspector of Workshops and Bakehouses

*S. G. RACKHAM.

Inspector under the Tuberculosis Order.

*MISS MARION GIBSON.

Tuberculosis Nurse.

MISS S. JONES.

Inspector under the Shops Act, 1912.

GEORGE WILLS.

Inspector of Common Lodging Houses and Houses let in Lodgings.

JOHN JONES.

Disinfecting Inspector.

ISAAC TAYLOR.

Keeper of Disinfecting House.

JNO. TAYLOR.

Inspector of Midwives and Health Visitors.

*MISS M. E. HUGHES.

Health Visitors.

*MISS E. A. RADFORD.

*MISS G. E. CARRE.

Disinfecting Labourers.

ROBERT NIELD.

*JOHN JACKMAN.

TIMOTHY J. SCOTT.

| Those marked thus * have passed the examination of the Sanitary Institute or the Scottish Sanitary Institute.

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*To the Mayor, Aldermen, and Council of the
County Borough of Birkenhead.*

GENTLEMEN,

I have the honour of submitting to you my Twenty-Third Report to the Health Committee on the Health of Birkenhead, viz., that for the year 1914.

This will be found to be on the same lines as in previous years, an arrangement which has been found very convenient for reference.

I would again record my indebtedness to my fellow officials in the Public Health Department—especially to Mr. Wm. Dawson, the Chief Inspector—for the valuable and willing help they have given me at all times in carrying out the duties of my office, and to Mr. John Owen, my statistical clerk, for the assistance he has given in preparing this report.

Two of my clerical staff, Mr. J. R. Knowles and Mr. John Owen, volunteered for service with the Army, of which the Department are duly proud. But it is to be regretted that Mr. Owen afterwards strained his foot in marching, and had to give up the Army on this account.

I have the honour to be,

Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

April 10th, 1915.

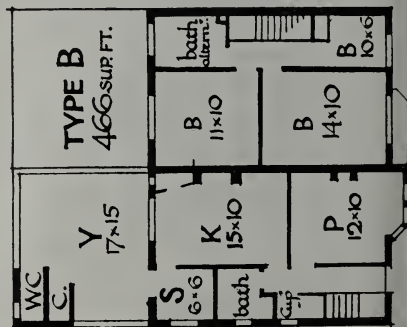
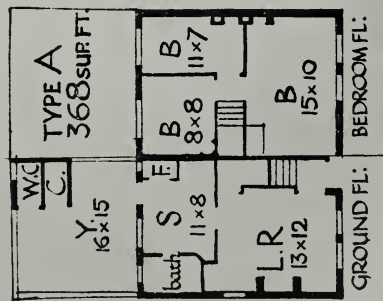
COUNTY BOROUGH OF BIRKENHEAD

DURING 1914.

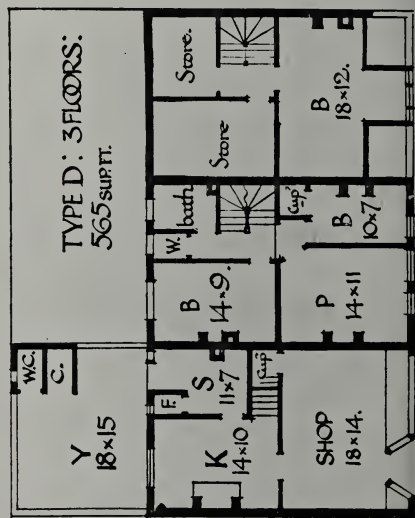
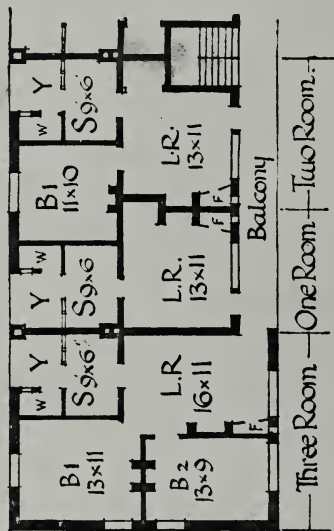
SHORT SUMMARY.

Area in Acres.	3,850, or a little more than 6 square miles.
Population (at Midsummer)	137,996
No. of Inhabited Houses at time of Census, 1911	24,343
Number of Persons per House at time of Census, 1911	5.3
Rateable Value	£709,863
rd. in the £ yielded for General Purposes	£2,775
rd. in the £ yielded for Sanitary Purposes.....	£2,530
Number of Persons per Acre (Density of Population)	35.8
Birth Rate per 1,000 living.....	27.3
Death Rate do.	15.6
Zymotic Death Rate per 1,000 living	1.7
Phthisis Death Rate do.	1.0
Average Death Rate last 10 years	15.4
Deaths of Children under 1 year of age to 1,000 Births	122
Percentage of Uncertified Deaths	0.27
No. of Houses in the Borough, Dec. 31st, 1914	26,723
Houses provided with Ashbins.....	18,850
Houses provided with Ashpits	8,000

All the houses are provided with w.c's. with the exception of about 20, which have privies. 13 of these are not used. The 7 are in places where at present w.c's. cannot be provided. There are 3 earth closets in Oxtou.



TYPE C: THREE-STOREY FLATS



It had been decided that land in the North End of the town and known as the Gilbrook Estate, belonging to the Corporation should be utilised as a site for working class dwellings, and Mr. Rees and I were asked to consult together and report to the Committee how we thought the land could best be laid out, and a scheme has been formulated and generally approved by the Council. It is to be known as the

GILBROOK ESTATE HOUSING SCHEME.

This estate was laid out in 1886, and the streets made, sewered, curbed and channelled. These streets have been retained and the buildings planned and arranged to suit them.

The land is bounded on the South side by Norman Street and Upper Brassey Street, on the West by Lansdowne Road, on the North by Laird Street and on the East by the Laird Street Schools and playground, and the end of certain houses on the North side of Upper Brassey Street.

The site having been carefully surveyed and levels taken, by Mr. Rees the number and type of houses to be erected was settled according to the following Schedule, which gives the correct number of houses in the different blocks and flats.

From this it will be seen that we get :—

10 blocks containing 64 houses of Type A (small).

7 blocks containing 40 houses of Type A (large).

10 blocks containing 60 houses of Type B.

7 blocks of flats, containing 120 separate dwellings of the different Types C.

2 blocks of 15 shops of Type D.

Total number of dwellings .. 299

Type A (small) are shewn to consist of self-contained dwellings, having an average frontage of 16 feet, and a depth

of 38 feet, including yard, but exclusive of fore court and passage. Each house contains on the

Ground floor ..Living Room 13 ft. by 11 ft. 3 ins.
 Scullery, with Boiler, 7 ft. 10½ ins. by 8 ft.
 Bathroom (separate), 6 ft. 9 ins. by 4 ft. 6 ins.
 Food Store 4 ft. by 2 ft.
 Store under Stairs.
 Porch to Front Entrance.

First Floor ..Bedroom, front, 15 ft. 3 ins. by 9 ft. 10½ ins.
 Bedroom, back, 11 ft. 3 ins. by 6 ft. 6 ins.
 Bedroom, back, 8 ft. by 8 ft. 6 ins.
 W.C., Coals, and Ashes in yard.

Type A (large) are self-contained dwellings, with an average frontage of 17 ft. 6 ins., and a depth of 38 ft., including yard, but exclusive of fore court and passage.

The accommodation is as follows :—

Ground Floor..Living Room, 13 ft. by 13 ft.
 Scullery, with Boiler, 9 ft. by 7 ft. 10 ins.
 Bathroom (separate), 6 ft. 6 ins. by 4 ft. 10 ins.
 Larder food store, 4 ft. 6 ins. by 2 ft. 9 ins.
 Store under Stairs.
 Porch and Front Entrance.

First Floor ..Bedroom, front, 16 ft. 10 ins. by 10 ft. 1 in.
 Bedroom, back, 8 ft. by 7 ft. 10½ ins.
 Bedroom, back, 8 ft. 6 ins. by 11 ft.
 W.C., Coals, and Ashbin in Yard.

Type B show the houses which are planned to face Brassey Street, Norman Street, and Lansdowne Road. They are larger than Type A, and contain an extra room, viz., Parlour with bay window. The frontage to each house is 17 ft. 6 ins., and the average depth, including yard and small garden plot in front but exclusive of passage, is 57 ft. 6 ins.

Each house contains on the

Ground Floor..Kitchen 14 ft. 9 ins. by 10 ft. 6 ins.

Parlour 10 ft. 6 ins. by 10 ft. 3 ins.

Scullery.

Food cupboard and store.

In the end houses Bathrooms are provided on Ground Floor.

First Floor..Bedroom 13 ft. 4 ins. by 10 ft. $4\frac{1}{2}$ ins.

Bedroom 11 ft. 9 ins. by 10 ft. $4\frac{1}{2}$ ins.

Bedroom 10 ft. by 6 ft.

An alternative plan will be carried out in certain of the Type B houses, in which the Bathroom will be on the upper floor, adjoining the back bedroom.

Flats, Type C.—Seven blocks of flats have been arranged for, six overlooking the playgrounds, and one at the junction of Norman Street and Lansdowne Road.

The two blocks of flats facing the playgrounds each contain 12 three-room houses, consisting of Living Room, two Bedrooms, and Scullery, and 6 two-room ones consisting of Living Room, Bedroom, and Scullery.

Four other blocks of flats each contain 6 three-room dwellings, 6 two-room, and 6 one-room.

And one block of flats provides for 12 three-room dwellings.

N.B.—The Scullery is not counted as a room in these flats.

The average sizes of rooms to each flat will be :—

Living Room 13 ft. 6 ins. by 12 ft. 3 ins.

Bedroom 11 ft. 6 ins. by 10 ft. 6 ins.

Bedroom 12 ft. 3 ins. by 9 ft. 3 ins.

Scullery, with Boiler, Bath, and Sink.

A small yard with W.C. and Dust Shoot is provided for each house in the flat.

All the houses in the flats are entered from balconies, which are reached by a central stone staircase.

It is impossible in houses of this description to give a separate room for the bath as in self-contained houses.

The two blocks of ground, fronting Laird Street, have been reserved, giving sites for 15 shops with 18 ft. 6 in. frontages.

Each will have

Shop	- -	17 ft. 8 ins. by 14 ft.
Living Room	-	14 ft. 2 ins. by 10 ft.
Scullery	- -	10 ft. 9 ins. by 7 ft. 4 ins.
Sitting Room	-	14 ft. by 10 ft. 6 ins.
Bedroom	-	13 ft. 9 ins. by 9 ft.
Bedroom	-	10 ft. 9 ins. by 6 ft. 9 ins.
Bathroom	-	7 ft. 9 ins. by 5 ft.
Attic	- -	17 ft. 8 ins. by 12 ft.

Coals, Ashbin, and W.C. in Yard.

All the self-contained houses will have back boiler to Kitchen fireplace for hot water supply, but a Central Heating Apparatus with boiler will be provided in an apartment in the basement of each block of flats, which will give a continuous supply of Hot Water and will be charged for in a slightly increased rental. These boilers will require the attention of one or more Keepers.

The question of lighting has been very carefully considered. Gas will be laid on to each of the houses, and pipes carried to a suitable position in Scullery for a small gas cooker or ring.

If Electricity can be obtained at a rate which would compete with Gas, including renewal of Lamps, &c., some of the better houses may be wired for same. Although a more costly installation, I consider it will be cleaner and healthier for the tenants than gas.

In the flats, the floors, staircases, and balconies will be fireproof throughout. The living rooms and bedrooms will have boarded floors, laid on coke breeze concrete, and the scullery and yards will be finished in cement.

The Cottages will have joist and boarded floors to living rooms and bedrooms, and cement finish to scullery, yards, &c.

The walls internally will be plastered, except bathrooms, larders, &c., which will be flat pointed for colour wash.

Where the Cottages are set back from building line, it is proposed to cover the space with concrete and throw the extra width into the footway, making a good open space in front of each block. Trees could be planted at intervals, and if properly cared for, would, I am sure, thrive and be much appreciated by tenants.

At the corner of Lansdowne Road and Norman Street, a circular shrubbery is shewn (enclosed in iron fencing), which will enhance the appearance of this part of the Estate.

Enclosed Playgrounds are shewn for boys and girls, with shelters and lavatories. The large Playground to Brassey Street will probably be reserved for young children.

These would be fitted with swings and see-saws, and partially planted.

Closely allied to the question of Housing is that of the "Personal Cleanliness of the Lower Working Classes and of the Submerged Tenth."

I am afraid there is no denying the fact that a large proportion of our lower working class population pass their lives from year to year without washing themselves in any way except, perhaps, their hands and faces daily. All doctors who have public hospitals under their control are constantly meeting these cases, and only a short time ago I had in hos-

pital the wife of a fairly well-to-do working man, a comparatively young woman too, who admitted she had not had a bath or been properly washed for over fourteen years. What her children would be like you can imagine, yet this is not an isolated or uncommon instance ; and I will guarantee that if house to house inquiries were made, and true answers could be got, that the same story would be told by a large percentage of these people. Nor is it to be wondered at when we consider the sanitary conveniences of their houses, as we now find them existing in this country ; indeed, on the contrary, it is easy to understand how such dirty habits are fostered and grow.

When we look at the houses in which such people live, consisting as they often do of only one, two, or at most four rooms, without any conveniences whatever in the form of baths, or indeed sometimes not even a sink and proper water supply, the difficulties to be overcome before a bath or proper cleanliness can be obtained are almost insuperable ; and these evils, which appear to have become almost inherent in the social life of the poor, depend far less on the depravity of the people than on their ignorance, and the total lack of any handy means for personal washing.

A family will probably consist of the father, mother, and perhaps four to seven children of all ages and both sexes ; it will be readily imagined, therefore, with what difficulty a man or his wife, or a grown-up son or daughter, would obtain a proper bath in a two or three-roomed cottage, or even a four-roomed house, under such circumstances, with any pretence to the commonest laws of decency ; whilst it is a fact that in very few instances will they be in possession of any suitable vessel in which a bath can be obtained, or hot water provided. Is it surprising, therefore, that they get out of the habit of washing, until in the end they get, as we know they do, positively afraid of a bath, lest it should kill them.

The sequel to all this, of course, is filthy persons, filthy clothes, beds and bedding, and all the resulting filth diseases, such as the verminous conditions and typhus fever, which thrive so splendidly amongst this class of population. It is difficult to ascertain the extent to which the health of the people suffers from this want of proper cleanliness ; but one must believe that life under such conditions cannot be conducive to health, either of mind or of body. It becomes therefore a question of economics, not less than of sanitary importance, for it is obvious that the remote effects of such sickness as this filthy condition engenders, must be disastrous to the health and physical well-being of the people, and more especially of the children brought up under such conditions, and must seriously impair their capacity for labour. •

How, then, are we going to combat the persistence of these adverse influences ? They are not like ordinary nuisances, summarily removable by legislative procedure, and it seems to me that public baths and wash-houses (of which I spoke in my last annual report), easily accessible, and at little or no cost to the poor, is the only way in which at present we can hope to get improvement in this condition of personal cleanliness.

Of course, at first there would be considerable difficulty in getting the persons for whom they are intended to avail themselves of them ; but time would gradually remove difficulties of this description.

In Edinburgh, where a system of public wash-houses has been started, which has proved eminently satisfactory, they have apparently solved two of the most difficult problems of the present day, viz., how to get people to use public wash-houses, and how to get them to wash themselves.

In their first attempts, the Edinburgh Council were unsuccessful, because they went on the usual lines of providing a wash-house with apparatus for washing clothes and

nothing more, and the scheme had to be abandoned. Their second attempt, however, has been a great success. My friend, Sir James Russell, Chairman of the Sanitary Committee of the City Council, and formerly Lord Provost, has given me the key to the secret of their success.

He says, "in their present washing-houses, which are placed in the midst of a poor population, they have a large hall, round which there are cells containing earthenware basins let into a concrete floor, with discharge plugs, and hot and cold water. The people can here undress, and stand in these basins to have a wash, the hall being fitted with warm air—a very important feature, as they would not be got to undress and bathe in a cold room."

At present these places are only connected with the general wash-houses for clothes washing, the charge per hour paying both for the use of the clothes-washing apparatus, and for the baths afterwards. They find the women readily avail themselves of the opportunity for washing, and there seems to be no reason why the bath should not be allowed to be taken quite irrespective of the clothes washing; and in my opinion such places ought to be provided free to the poor, and every inducement given them to come and make themselves and their children clean.

In Edinburgh, also, there is an association for improving the *dwelling*s of the poor, of which, also, Sir James Russell is chairman. In the tenements built by this association, each flat has a proper wash-house with all the necessary apparatus at the disposal of the families living in the flat in rotation. The tenants prefer this arrangement to using the more distant public wash-house, and they save the charge per hour made in them. The tenants are mostly very poor—in fact, were slum-dwellers. In connection with and adjoining each wash-house there is a wooden plunge-bath, which is in much request. The keys of these washing places

pass in rotation to the next tenant, or to the tenant who is caretaker, as the case may be.

Here, then, we have the germ of reform which, if steadily nurtured, may lead in the future to a very great improvement in the personal sanitation (if I may so call it) of the lower classes. I think that in the case of new houses, it should be made compulsory in all building regulations, that to every house, or to all terraces or blocks of houses, builders should provide, either by outbuilding or by proper additions of the ordinary requirements, suitable places in which cleanliness, not only of the person, but of the household necessities, can be obtained.

Of course, we shall have to meet the difficulties as we now find them existing in the homes of the working-classes to-day, and the only way in which this can be done for old houses, seems to be the establishment of *public* wash-houses on lines similar to those at present so successfully carried out in Edinburgh, and I would therefore strongly urge upon the Council the adoption of such places in connection with the Public Baths as mentioned in my last year's report (page 9).

Closely allied to Municipal Housing is the question of providing a

MUNICIPAL LODGING HOUSE.

In 1903 I made a report on Municipal Lodging Houses, and I again referred to the matter in my last two Annual Reports. I was pleased, therefore, when on the 13th December, 1913, the Council passed a resolution instructing me to report further upon the question of erecting a "Municipal Lodging House." And following upon this on the 16th June, 1914, the Council authorised the Chairman of the Health Committee and myself to visit Glasgow and see what had been done there in this very important matter; subsequently, on October 6th, 1914, we presented the following:—

REPORT ON A VISIT TO THE GLASGOW FAMILY HOMES, &c.

To the Members of the Health Committee.

GENTLEMEN,

In accordance with your request we visited Glasgow on the 10th September and made an inspection of the Workmen's Family Home, and the Lodging Houses and some blocks of houses for the Working Classes in that City. Mr. Councillor Rowlands also (unofficially) accompanied us and joins us in this report.

The Family Home is situated in St. Andrew Street off the Salt Market, one of the poorest parts of the city and is in a certain way a development of the lodging-house provisions. It was erected in 1896 to meet, if possible, the requirements of the single man of the labouring class and to help him if possible to obtain clean, comfortable and cheap accommodation in lodgings—but more particularly to meet the case of the wage-earning widower who is left with several young children to keep and look after.

His is a particularly hard case; his wages have to be spent in providing food, clothing and shelter for his motherless children, and anything that remains after these primary expenses are met, is usually insufficient to enable the father to engage the services of a nurse or housekeeper at the most meagre remuneration. The result is that, when the father is at work, the children have either to be locked in or out of the dwelling, and their food provided by the good offices of some kindly neighbour.

It was especially to meet the needs of this class of men that the home was opened.

It contains 160 single bedrooms, plainly furnished, each capable of accommodating one adult and three children; a common dining-hall and kitchen with gas fires and steam-

jacketed boilers, etc., necessary for all the cooking requirements. There are also a nursery, recreation rooms, library, baths and lavatories, and the building throughout is lighted by electricity and warmed by a hot-water heating installation.

The rent charges for each of these bedrooms, including heating, lighting and cleaning, with the use of dining and recreation rooms and other priveleges of the homes is 5/6 per week, payable in advance. If the number of children in a family is more than three, accommodation is found for the additional children beyond that number in a common dormitory, at a charge of 8d. per week extra per child. The children are boarded at an average charge of 1/10 per week for each child.

The Home is managed by a Superintendent and a Matron, with a staff of nurses and servants.

Servants supply their meals, attend to their cleanliness, and see that those of school age are duly sent to school. Nurses are provided to take care of those under school age, and generally the Superintendent and the Matron act during the daily absence of the father in "loco parentis."

The children are solely under the control of these two officials from the time the parent leaves for work in the morning until he returns in the evening.

Regular meals are cooked and supplied to the adult residents at the lowest possible charges.

Breakfast, including Ham and Egg, bread butter and tea, 5d.

Dinner of Soup, Beef and Potatoes, milk pudding, 5d.

Tea. Plain tea, with scones, butter, jam or jelly and tea, 4d.

If he comes in later he can get extra things for 1d. or 2d., according to what he wants, and for 3d. either beef and potatoes or ham and eggs. 1d. for pudding or soup with bread.

The children who are boarded at 1/10 per week as stated above obtain for this daily

Breakfast, consisting of porridge and milk, tea, bread and butter.

Dinner, a basin of soup and bread.

Tea, tea and bread and butter, and for 1d. extra he can get jam.

The charge however varies slightly

If a man has only one child he pays 2/- per week for it, for two children 1/10 each, for three or more children 1/8 each.

The 5/6 a week paid by the father includes bed and bed clothes, cupboard, table, 2 chairs, bath, and towel for children.

A man cannot have more than three children in one room with him and no child over 10 years. For other children not included in this, 8d. per week extra for each child not in the room.

In case of any child developing symptoms of disease, the Superintendent advises the father to call in medical assistance, and, in the event of the parent's failure, calls an independent medical practitioner at the parent's expense. If cases of infectious disease appear, the Medical Officer of Health can at once certify the patient for removal to the Infectious Diseases Hospital.

The Home is run at an annual loss, the deficit last year being about £1,000.

As an offset against this a great gain is to be found in maintaining the health, and the moral aspect of the surroundings of the children—instead of being neglected, dirty, ill-fed, at a loose end, running about the streets and subject to every kind of adverse influence which such conditions

entail—the children are brought up under most favourable conditions, well-housed and well-fed, amusement found for them in their spare hours, some love and friendly care bestowed upon them by the nurses and the whole aspect of their lives turned from a wilderness into a happy, respectable and cleanly youth which has its effect on the subsequent citizen of later life. It is impossible to appraise the value of such upbringing on the ultimate good to the child and the community and it is impossible to estimate how many of the children thus cared for would under other circumstances have drifted into pauperism and crime—and thus have been a charge on the community.

We were very much struck with this aspect of the subject, and it is for the Committee to judge how far some loss on the working of the establishment is compensated for by the other side of the picture. The loss incurred on the home at Glasgow was largely due to the great initial cost of the land and building. The revenue of last year was £3,354 10s., and the working expenses £3,403, a loss of only £48, but interest and sinking fund makes up the difference.

The site was valued at £6,732 and the buildings at £17,628 a total cost of £24,360, which at 1% interest equals £960.

We also inspected the Municipal Lodging Houses, but although they are well managed and convenient places there were no special features about them calling for remark.

As regards the houses of the working classes which have been erected by the Glasgow Corporation we were kindly shown several different blocks including those most recently erected at Kenny Hill. They are all erected on the Tenement system in accordance with the usual mode of life amongst the working classes of the large towns of Scotland; and in some ways they are not quite applicable to English life although possessing many admirable features—an exception

might be made in the case of the single-room dwelling where their arrangement of bed-closet, scullery-corner, and dwelling room portion in one room was excellent. In other respects we think that the housing schemes in Liverpool meet the requirements of English life better than any we saw in Glasgow.

We are, Gentlemen,

Faithfully yours,

(Signed) E. G. MASON, *Chairman*.

D. R. ROWLANDS.

R. SYDNEY MARSDEN, *M.O.H.*

This was referred to the Housing Committee

Another subject which occupied the attention of the Committee for a considerable time was that of

MATERNITY AND CHILD WELFARE.

And in relation to this matter I made a report to the Committee on the following lines:—

In the circular letter from the Local Government Board, dated 30th July, 1914, relative to the above matter.

The Board point out that an estimate has been laid before Parliament for a grant, to be distributed by the Board, in aid of the expenditure of Local Authorities in respect of Institutions or other provision for maternity and child welfare. This grant, if voted by Parliament, will be made in aid of expenditure in respect of Clinics, Dispensaries, or other Institutions primarily concerned with the provision of medical and surgical advice and treatment, as well as in respect of the salaries of health visitors and other officers engaged for this work.

Up to the present, Local Authorities, in their infant welfare work, have concerned themselves chiefly with the child in its first year of life. The Board now considers that

the subject should be dealt with on a more comprehensive basis, dealing with the whole period from birth until the time the child enters school. It suggests that work should be undertaken in two directions :—

- 1st. The securing of improved ante-natal and natal conditions ;
- 2nd. The continuing of the work in relation to children beyond the first year of life.

The accompanying Memorandum sets out fully the arrangements which the Board thinks should be carried out.

(COPY)

MEMORANDUM.

MATERNITY AND CHILD WELFARE.

A complete scheme would comprise the following elements, each of which will, in this connection, be organised in its direct bearing on infantile health.

1. Arrangements for the local supervision of Midwives.
2. Arrangements for—
 - ANTE-NATAL.
 - (1) An Antenatal Clinic for expectant mothers.
 - (2) The home visiting of expectant mothers.
 - (3) A Maternity Hospital or beds at a hospital, in which complicated cases of pregnancy can receive treatment.
3. Arrangements for—
 - NATAL.
 - (1) Such assistance as may be needed to ensure the mother having skilled and prompt attendance during confinement at home.
 - (2) The confinement of sick women, including women having contracted pelvis or suffering from any other condition involving danger to the mother or infant, at a hospital.

4. Arrangements for—

POST-NATAL.

(1) The treatment in a hospital of complications arising after parturition, whether in the mother or in the infant.

(2) The provision of systematic advice and treatment for infants at a Baby Clinic or Infant Dispensary.

(3) The continuance of these Clinics and Dispensaries, so as to be available for children up to the age when they are entered on a school register, *i.e.*, the register of a Public Elementary School, Nursery School, Crèche, Day Nursery, School for Mothers, or other school.

(4) The systematic home visitation of infants and of children not on a school register as above defined.

LOCAL GOVERNMENT BOARD,
WHITEHALL, S.W.,
July, 1914.

It will be obvious to the Committee that to do this work as suggested, it will be necessary that a special Sub-Department be created for the purpose, in which clinical advice can be given, and a “mothers’ welcome” and infants’ dispensary can be carried on.

There is no place at present under the control of the Committee available for such work, and premises would have to be obtained and adapted to the purposes and requirements. Arrangements would also have to be made for beds at the Maternity or other Hospital, in which complicated cases of pregnancy could receive treatment. The number of Health Visitors would have to be increased if the systematic home visitation of infants and of children not on a school register, as above defined, has to be carried out.

I would suggest therefore that the premises should be purchased for this purpose, in a central position, and close proximity to the Town Hall, so that the work can easily and conveniently be supervised by me.

There would have to be a waiting room and a room for baby clinic, and dispensary treatment.

Also rooms for doctor's consulting room, nurses' work and cloak rooms, and a separate waiting room for women seeking special advice, and a room for the chief female inspector ; in addition to these, rooms for the inspector of midwives, and the clerical and record rooms, and also for stores, &c., would be required.

As regards the work at the Baby Clinic and Dispensary, Here mothers will receive first aid and advice in the feeding and care of their children. Records will be taken of their home conditions, and where physical defects in the children are found requiring medical treatment they will be brought under the notice of the Supervising Medical Officer and will be referred as far as possible to their own medical attendant for treatment, who will also be informed of the advice given, every care being taken to work harmoniously with the medical profession. In cases where the people are too poor to obtain the necessary attention they will be seen by the Medical Officer, and such treatment and extra nourishment will be given at the Dispensary as he may advise, but in any case only such treatment and extra nourishment will be given as is necessary to safeguard the welfare of the child during its growth in the early years of life.

Some time ago when I was visiting some of these so-called " Mothers' Welcomes " I was greatly struck with the influence which they had upon the minds of the women attending.

Although conducted differently in different places still they are all run on the same general principles.

The poorest mothers and those with sickly children are induced to come to the "Mothers' Welcome" and there they are received with considerable kindness, their babies examined by a medical man or a competently trained nurse and advice given as to feeding, clothing, etc., as above described, but that is not the chief advantage, the babies are weighed from week to week and their progress recorded in a register—it is this part of the process, I noticed, which interested the mothers most. They compared notes with each other as to the weights and progressive growth of their children, rivalry came into play, and with that, an ambition to get their babies better and finer than their neighbours—a new interest in connection with the child is created and with it a growth of parental affection and a feeling of desire to give up something for the good of the child. No longer is the infant left in the cradle with a bottle of milk to overstuff its stomach, until it vomits it back, whilst the mother goes out to the theatre, or gala or other amusement. No, she has been told if her child is to grow properly this mus'n't be done, so she foregoes the excitement in the interest for her child, and she and it and the nation reaps the benefit and reward.

I am satisfied from what I have seen that these places can do an immense amount of good.

"FOLLOWING UP."

The present systematic home visitation to all mothers after notification of a birth will be continued, but instead of stopping at the end of the first year of life, the child's welfare and after-care will be watched and the homes visited periodically from the early years up to the child reaching school age.

Friendly relations will be maintained with the parents during this period, and the work carried on in such a manner as not to be inquisitorial, but that the mothers may feel that the nurses and the Institution are a real help to them.

Of course where children are in good homes, properly housed, clothed, and fed, and doing well, the visit will be merely nominal, and considerable discretion used not to give offence, but in the poorer cases an effort will be made to induce the mothers to bring the children to the Dispensary so that their progress, development, and care, can be watched and recorded, and, where necessary, assisted in various ways.

It is hoped that by doing this many children who now suffer from want and neglect in their early childhood, and thus become wrecks and a charge on the community in later life, may be saved and converted into healthy men and women, better able to support themselves afterwards in the struggles of life.

“PREGNANCY AND PRE-NATAL CONDITIONS.”

In regard to Pregnancy and Pre-Natal conditions, women will be encouraged to come and seek advice from the Special Dispensary Medical Officer on Pre-Natal troubles or possible complications of Pregnancy, and as far as possible their own medical attendant will be consulted in the first instance; nothing being done that could in any way introduce difficulties between the patient and the family doctor.

In complicated cases, requiring special care and treatment, the women will be sent into the Maternity or other Hospital, for treatment in the special beds which you will probably have reserved for you in the Institution.

Treatment in Hospital will also be given, where necessary, of complications arising in childbirth, whether in the mother or the infant.

By these means it is hoped that we shall be able materially to help forward the work of Maternity and Child Welfare in the manner suggested, and so earnestly pressed by the Government.

The Scheme for dealing with this work was submitted to the Council by the Health Committee, but its consideration was deferred for the present.

SPECIAL WORK DONE IN CONSEQUENCE OF THE WAR.

A good deal of extra work has had to be done by the Health Department in connection with the outbreak of the War and the opening of a number of Schools, dwelling-houses and other buildings for Military purposes, all of which have had to be examined and reported upon as to their sanitary arrangements and conditions, and where necessary put into proper order.

The premises have also been frequently and regularly inspected.

Special arrangements have been made for the frequent removal of the domestic refuse.

The following is a summary of the work done in this connection by the Department, viz :—

Schools examined before being occupied by troops..	5
Houses do. do. do.	11
Other premises do. do. do.....	2
	<hr/>
	18
	<hr/>

The number of visits paid by the District Sanitary Inspectors to the above premises was 464, and a very large number of visits of inspection have also been made by the Chief Inspector of Nuisances and myself.

The total number of articles of bedding, clothing, etc., disinfected for the Military Authorities during 1914 was 7,002. A large proportion of these being in a verminous condition.

In the succeeding pages of this report will be found details of the work carried on by the Public Health Department, together with the vital and mortal statistics of the Borough during the year under consideration, as follows :—

DETAILED STATEMENT OF THE WORK OF THE PUBLIC HEALTH DEPARTMENT DURING 1914.

Ordinary Sanitary Operations.—The ordinary sanitary operations of the Department have continued to receive unremitting attention. House-to-house inspections of the cottage property in the Borough have been regularly made. Gulleys and passage drains have been periodically cleansed, public fountains, &c., have been scoured and kept in order, and the systematic removal of ashpit and house refuse at stated intervals has been carefully superintended.

Summary of Nuisances, &c.—The summary of nuisances investigated and dealt with during 1914, is as follows :—

Number of nuisances reported	.. ..	9013
Number of formal notices given	.. ..	2689
Number abated after formal notice and without proceedings	.. ..	9013
Number of cases in which proceedings had to be taken for ordinary nuisances	.. ..	nil
Number abated after proceedings	.. ..	nil
House disinfecting notices	.. ..	398
Nuisances at houses let in lodgings	.. ..	152
Nuisances at common lodging houses	.. ..	102
Notices for cleansing of filthy houses	.. ..	39

A brief statement of the other measures taken in 1914 for correcting or getting rid of whatever appeared to be prejudicial to health is subjoined.

Sanitary defects reported by the Inspectors and referred for the action of the Borough Surveyor	500
Matters reported to Waer Engineer ..	264
Matters reported to Borough Treasurer ..	90
Houses or parts of houses specially disinfected by formalin or other disinfectants ..	780
Notice to whitewash and efficiently cleanse milk-houses, cowsheds and dairies, given and complied with	416
Offensive privies abolished (3) and conversions into water-closets (1)	4
Parcels of infected bedding and clothes disinfected at the Disinfecting House ..	850
Parcels of infected or discarded bedding and clothes destroyed	550
Carcases of dogs and cats, &c., removed from pools or waste land and buried ..	59
Deposits of putrid fish and other objectionable refuse removed	2
Total	<u>3515</u>

In addition to the above, the following work has been done :—

Number of excavations made for the purpose of testing the condition of house drains	161
Number of smoke tests applied to drains of premises reconstructed under the supervision of this Department	210
Number of water tests applied to drains ..	186
Number of 'smoke tests applied to the drains of new buildings, in conjunction with the Borough Surveyor's Department..	218

Every effort is made to keep down public or private nuisances dangerous to the community, which tends to the advantage of the public, both as regards health and comfort.

District Inspections.—The following is a statement of the work done by the District Inspectors of Nuisances and the Disinfecting Inspector during 1914.

	Number of Visits and Revisits made to Insanitary Property.
District I.—Inspector Croshaw	5516
„ II.— „ Lee	4107
„ III.— „ H. T. Taylor	4115
„ IV.— „ W. H. Tilston	5709
Disinfecting Inspector Isaac Taylor	4923
Total	24370

Smoke Nuisances.—Observations were taken of the smoke emitted from the factory and other chimneys of the Borough during the year 1914, 2 notices were served for the abatement of smoke nuisances.

Inspection of School Premises.

Working in conjunction with the Education Department, I had 35 schools specially examined by the District Inspectors and reported thereon to the Education Committee.

Inspection of Common Lodging Houses and Houses Let in Lodgings.

The following is a statement of the work performed during the year 1914 by the Inspector of Common Lodging Houses and Houses let in Lodgings, viz.:—

REGISTERED COMMON LODGING HOUSES.

Day Inspections	4398
Night Inspections	595

The total number of registered lodging houses is 19.

REGISTERED HOUSES LET IN LODGINGS.

Day Inspections	3309
Night Inspections	374

The total number of houses let in lodgings on the register at the end of 1914 was 719.

Corporation Tenement Dwellings.—382 visits were made during the year by the Inspector of Lodging Houses, &c., and 440 nuisances were reported, which have been abated.

FACTORY AND WORKSHOP ACTS, 1901 and 1907.

In connection with the carrying out of the provisions of these Acts, the following is a statement of the work done by the Inspector during the year, viz. :—

1130 visits have been made to workshops.

525 visits have been made to bakehouses.

21 visits have been made to workplaces.

49 visits have been made to homeworkers' premises.

44 workshops, including 6 bakehouses, have been placed on the register during the year, making a total of 442 up to the end of 1914, of which 64 are bakehouses and 48 are confectioners' shops.

23 workshops have been closed.

3 workshops have been transferred to more suitable premises.

110 nuisances in connection with workshops have been reported and abated.

36 notices have been served for the abatement of nuisances arising out of defective drainage, and 12 for inefficient ventilation.

28 notices to cleanse and limewash the workshops have been served and complied with.

414 occupiers of workshops have limewashed their premises under inspection, but without waiting for the formal notice.

No case of overcrowding has been reported during the year.

12 failures to affix abstract of the Factory and Workshops Act (s. 133) have been reported and dealt with.

Lists of out-workers have been carefully kept, and notices in the form prescribed by the Secretary of State, as given in my Report for 1892 (pp. 57 and 58), have been served when necessary.

Laundries.—157 visits were made during the year to the 46 laundries at present on the register.

Bakehouses.—The duties involved in carrying out the provisions of the Acts relating to the sanitary condition of bakehouses have been put under a special Inspector, and during the year 525 visits have been made to bakehouses.

There has been a very great improvement secured by this systematic inspection.

SHOPS ACTS, 1912 and 1913.

(Which repeal the Shops Regulations Acts, 1892—1911.)

The total number of visits paid to the various shops under the provisions of the above Acts and orders made thereunder during the year was 8,119.

The particulars respecting the various proceedings and prosecutions taken under these Acts and Orders during the year are as follows, viz. :—

48 infringements were reported and 39 letters of warning sent in connection therewith, prosecutions being taken in the remaining 7 cases, with the following results :—

For failing to close the shops for the sale of certain articles on the Weekly Half-holiday.		Fine.	Costs.
Ditto	Ditto	10/-	6/6
Ditto	Ditto	20/-	6/6
Ditto	Ditto	20/-	6/6
Ditto	Ditto	20/-	6/6
Ditto	Ditto	40/-	6/6
Ditto	Ditto	Dismissed.	
Ditto	Ditto	5/-	6/6

A Petition having been received from a number of shopkeepers requesting the Council to make an Order extending the Provisions of Section 4 of the Shops Act, 1912, to their class of shops, *i.e.*, Pork Butchers; the signatures to the Petition were verified and after consideration and compliance with the provisions of the Act, the Health Committee on the 6th October, 1914, decided to recommend the Council to make the following Order, viz. :—

COUNTY BOROUGH OF BIRKENHEAD.

SHOPS ACT, 1912.

NOTICE IS HEREBY GIVEN that an Order, a copy of which is hereunder set out, has been made by the Town Council and confirmed by the Secretary of State, as appears by a confirmation appended to such Order, a copy of which confirmation is also set out hereunder :—

Dated this 13th day of February, 1915.

(Signed) J. FEARNLEY,

Town Clerk.

COUNT BOROUGH OF BIRKENHEAD.

SHOPS ACT, 1912.

THE BIRKENHEAD HALF-HOLIDAY
EXTENSION (No. 1) ORDER, 1914.

THE TOWN COUNCIL of the County Borough of Birkenhead in pursuance of the powers conferred upon them by the Shops Act, 1912, and after due compliance with its provisions, DO HEREBY ORDER AS FOLLOWS :—

1. THIS ORDER may be cited as the "Birkenhead Half-Holiday Extension (No. 1) Order, 1914."
2. THE PROVISIONS of Section 4 of the Act are hereby extended to the undermentioned class of shops in the Borough of Birkenhead namely :—

PORK BUTCHERS SHOPS.

3. ALL SUCH SHOPS shall be closed for the weekly half-holiday at 1 p.m. on Monday throughout the year; PROVIDED THAT any Shopkeeper may substitute Saturday for Monday on affixing a notice to that effect in his shop.

AS WITNESS the Corporate Common Seal of the Mayor, Aldermen and Burgesses of the said Borough the Sixth day of November, 1914.

THE COMMON SEAL of the Mayor, Aldermen and Burgesses of the Borough of Birkenhead was hereunto affixed in the presence of

(Signed) JAMES MOON,
Mayor.

J. FEARNLEY,
Town Clerk.



(NOTE :—It is provided by Section 4 (5) of the Act that if a shop is closed throughout the whole of a Bank Holiday and the Bank Holiday does not fall on the day fixed for the weekly half-holiday, the shopkeeper may keep his shop open either on the half-holiday before or on the half-holiday after the Bank Holiday.

In pursuance of Sections 4 (6) and 6 (2) of the Shops Act, 1912, I hereby confirm the foregoing Order.

(Signed) R. McKENNA,

One of His Majesty's Principal Secretaries
of State.

Whitehall,
3rd February, 1915.

This recommendation was agreed to by the Council on the 28th October, 1914, and on the 3rd February, 1915, the Order was confirmed by the Home Secretary.

Administration of the Factory and Workshop Acts, 1901 and 1907,

IN CONNECTION WITH

Factories, Workshops, Laundries, Workplaces and Homework.

I. INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories (Including Factory Laundries)	6	1	—
Workshops (Including Workshop Laundries)	1812	79	—
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	21	—	—
Total	1839	80	—

2.—DEFECTS FOUND.

Particulars. (1)	Number of Defects			Number of Prosecutions. (5)
	Found (2)	Remed'd (3)	Referred H.M. Inspector (4)	
Nuisances under the Public Health Acts :—*				
Want of cleanliness	28	23	—	—
Want of ventilation	12	12	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	16	16	—	—
Sanitary accommodation { insufficient	—	—	—	—
{ unsuitable or defective	20	20	—	—
{ not separate for sexes	—	—	—	—
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).	34	34	—	—
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report).	—	—	—	—
Total	110	110	—	—

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Acts as remediable under the Public Health Acts.

3.—HOME WORK.

NATURE OF WORK.*	OUTWORKERS' LISTS, SECTION 107.						OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.				OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.				
	Lists received from Employers.						Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110).	Prosecutions (Sections 109, 110).			
	Sending twice in the year. Sending once in the year.														
	Lists,†	Con- tractors	Work- men.	Lists.	Con- tractors	Work- men.									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Wearing Apparel—															
(1) making, etc.	40	42	93	1	—	2	—	—	—	—	—	—	2	—	—
(2) cleaning & washing ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Furniture & upholstery ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	40	42	93	1	—	2	—	—	—	—	—	—	2	—	—

INSTRUCTIONS.—* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class only, but the outworkers should be assigned in column 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

† The figures required in columns 2, 3 and 4 are the total number of the lists received from those employers who comply strictly with the statutory duty of sending two lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be even numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name will often be repeated.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2).	Class. (1)	Number. (2)
Bakehouses	64	Matters notified to H.M. Inspector of Factories :— Failure to affix Abstract of the Factory and Workshop Act (s. 133) Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts but not under the Factory and Workshop Act (s. 5) Other	12
Confectioners	43		7
Laundries	46		
Other Workshop*	284		
Total number of workshops on Register...	442	Underground Bakehouses (s. 101) :— Permitted to be granted during the year Prohibited from 1st July 1909 to 31st Dec. 1909	These matters were attended to at the time. None. None.

5.—OTHER MATTERS.

The Midwives Act, 1902.

In connection with the carrying out of the provisions of this Act, a great deal of work was done during the year : not only in visiting the homes of midwives, but in interviewing them in connection with their work and explaining the provisions of the Act and the rules laid down for their guidance by the Central Midwives Board.

During the year 1914, 82 midwives entered their names on the local register as practising in the borough, being 6 more than last year, but names are constantly being added to the roll. Of the above 76, two of them subsequently left the district, and their names have been removed from the register accordingly. 5 midwives gave notice of change of address, and one had her name taken off the register at her own request.

During the year I received ten complaints against midwives. All of these were carefully investigated and the midwives in question interviewed. The Inspector also interviewed 55 midwives on minor matters where no complaint had been made.

Notices were received from midwives of 74 still births (45 male and 29 female) having occurred ; and 345 cases were notified in which medical aid had been called in, as against 285 last year.

The Inspector of midwives paid 285 visits of inspection to midwives, and I also inspected the bags and registers of a small number.

I received great assistance in connection with enquiries under this Act from the Female Health Visitors of the Birkenhead Society for the Prevention of Cruelty to Children, who work in conjunction with the Health Department by special arrangement, and a number of reports were made by them to me in important cases.

41 cases of unnotified births occurred. 26 of these were attended by medical practioners, 3 by certified midwives, 1 by an uncertified handy-woman, and 11 by the Maternity Hospital Authorities.

Notification of Births Act, 1907.

This Act was adopted in the Borough on January 3rd, 1912, and three women Health Visitors were appointed in connection with carrying out the work.

No. of births notified during the year	..	3481
No. of births attended by medical practitioners	..	506
No. of births attended by midwives	..	2760
No. of births attended in Maternity Hospital	..	189
No. of births attended in Union Infirmary	..	26
Total number of stillbirths for the year	..	120
Of these Medical Practitioners notified	..	27
Maternity Hospital notified	..	17
Union Infirmary notified	..	2
Midwives notified	..	74

The following is a record of the cases visited by the women Health Visitors during 1914, viz. :—

- 3396 first visits were paid to the homes.
- 5699 re-visits were made.
- 4073 visits were made to children over 1 year and under 5 years.
- 2923 infants were found to be breast fed.
- 84 infants were breast and artificially fed.
- 139 infants were fed on artificial foods.

Medical attention was advised in 234 cases and 76 cases of ophthalmia and 139 cases of slight inflammation of the eyes were carefully watched and recovery resulted in each case.

60 cases of Ophthalmia Neoatorum were notified.

146 enquiries were made in illness from diarrhœa, and also in 103 cases where death from diarrhœa had occurred.

90 cases of nuisances were reported to the Nuisance Department. 39 cases were referred to the Charity Organisation Society, and 22 cases reported to the Society for the Prevention of Cruelty to Children.

17 cases were sent to the school clinic and 5 to the Tuberculosis Dispensary.

The Ladies' Committee of the Society for Prevention of Cruelty to Children with whom we work jointly in regard to the Health Visitors, have allowed extra nourishment in the case of 133 children, and milk and cereals to 64 nursing mothers.

10 children were sent to a convalescent home.

170 cases were visited for the Soldiers' and Sailors' Families' Association.

Infectious Diseases (Prevention) Act, 1890.

107 Public Library and 12 School Library books were collected from infected houses and disinfected, and one book was destroyed.

Cleansing of Persons Act, 1897.

3 persons were cleansed under the provisions of this Act, at the special bath provided for this purpose at the disinfecting station in Corporation Road, and their clothing disinfected.

Seizure and Destruction of Unwholesome Meat, Fish, and Vegetables.

The Meat and Food Inspector has furnished the following particulars of meat, &c., unfit for human food, seized and destroyed during 1914.

The total weight of the meat destroyed amounted to 310 tons, 17 cwt., 3 qrs. Some of this was voluntarily surrendered by the butchers, they having called the Inspector's attention to it.

As in all recent years, a considerable proportion of the meat taken was on premises in connection with the Animals Wharf, Woodside. The total number of animals killed was :—

AT WOODSIDE LAIRAGE.

	Oxen	Sheep
Foreign (United States) ..	—	1707
Irish	149144	8464
Total	149144	10171

AT WALLASEY LANDING STAGE AND NO. 4 SHED, WALLASEY LAIRAGE.

	Oxen	Sheep
Canadian and American ..	..	..
Irish	305	2835

AT THE BIRKENHEAD ABATTOIR, NEW CHESTER ROAD.

Oxen, 1787; Sheep, 4208; Lambs, 3782; Calves, 363; Pigs, 4317; the total number of animals killed being 14457.

STATEMENT OF TOTAL SEIZURES.

For the year 1914.

Total number of—

Carcases seized during 1914 .. 412, weighing 141,947 lbs.

Immature Calves seized during 1914 1096, weighing 32,880 lbs.

Total.. 1508, weighing 174,827 lbs.

Parts of Carcases seized .. weight 25,067 lbs.

Offal seized , 398,804 lbs.

Of the above, the number of carcasses seized at—

	Beasts	and Lambs Sheep	Calves	Goats	Immature Calves	Pigs
Woodside—Foreign ..	—	—	—	—	—	—
Irish ..	233	15	—	—	1096	13
Abattoirs	7	3	—	1	—	10
Wallasey Stage	110	94	—	1	—	41
Wallasey No. 4 Shed..	2	18	—	—	—	12

63 carcasses and offal of animals suffering from foot and mouth disease were destroyed, weighing 21 tons 9 cwt.

Parts of carcasses seized at—

Woodside— .. weight lbs.

" Irish.. .. 250623 lbs.

Abattoirs " — lbs.

Wallasey Stage " — lbs.

Wallasey No. 4 Shed .. " — lbs.

250623 lbs.

In addition to the above the following articles were seized, viz. :—

Fruit on Street 200 lbs.

Market Hall 489 lbs.

Market Square Chickens .. 9 lbs.

Shops .. Offals 393 lbs.

Meat 732 lbs.

Meat Pies .. 92 lbs.

Carcase Goat .. 10 lbs.

Rabbits .. 803 lbs.

Total weight .. 2728 lbs.

Tuberculosis in the Animals.

The following is a Statement of the number of cases dealt with during the year 1st January to 31st December, 1914.

	WOODSIDE & WALLASEY STAGE.		THE ABATTOIRS.			
	No.	Weighing lbs.	Cattle.		Pigs.	
	No.	lbs.	No.	lbs. weight.	No.	lbs. weight.
FOREIGN CATTLE—						
No. where whole carcase was taken	—	—	—	—	—	—
No. where part only was taken....	—	—	—	—	—	—
No. where offal only was taken....	—	—	—	—	—	—
IRISH CATTLE—						
No. where whole carcase was taken	214	90737	4	2400	10	1680
No. where part only was taken....	184	25067	—	—	1	22
No. where offal only was taken....	223	22300	—	—	2	200

CHESHIRE CATTLE and PIGS at the Abattoir—

	No.	Weighing lbs.
No. where the whole carcase was taken..	4	2400
No. where part only was taken	1	22
No. where offal only was taken	2	200

Actinomyces at Woodside.

10 cases, heads or tongues or both, 180 lbs.

Proceedings taken under the "Sale of Food and Drugs Acts, 1875 to 1907."

The Chief Inspector (Mr. William Dawson) gives the following summary of proceedings taken under these Acts during 1914.

During the twelve months ending the 31st December, 1914, the following samples were taken and analysed, viz. :—

	Samples taken formally.		Samples taken informally.	
Milk	131	..	6
Butter	60	..	9

			Samples taken formally.	Samples taken informally.
Cheese .. ..	..	..	14	1
Lard .. ..	..	..	12	1
Coffee .. ..	..	..	10	2
Sweets .. ..	..	..	12	—
Malt Vinegar ..	..	..	10	—
Beer .. ..	..	..	10	—
Ground Rice ..	..	..	8	—
Cream .. ..	..	..	4	—
Cream of Tartar	..	..	3	—
Margarine .. ..	..	..	3	—
Tartaric Acid ..	..	..	3	—
Bread .. ..	..	..	2	—
Black Currant Jam	..	..	2	—
Damson Jam ..	..	..	2	—
Strawberry Jam	..	..	2	—
Raspberry Jam	..	..	2	—
Pepper .. ..	..	..	2	—
Cocoa .. ..	..	..	2	—
Mustard .. ..	..	..	2	—
Scotch Whisky ..	..	..	2	—
Irish Whisky ..	..	..	2	—
Rum .. ..	..	..	2	—
Gin .. ..	..	..	2	—
Brandy .. ..	..	..	2	—
Port Wine .. ..	..	..	2	—
Paregoric .. ..	..	..	2	—
Glycerine .. ..	..	..	2	—
Camphorated Oil	..	..	2	—
Castor Oil .. ..	..	..	2	—
Rhubarb .. ..	..	..	2	—
Epsom Salts .. ..	..	..	2	—
Honey .. ..	..	..	2	—
Olive Oil .. ..	..	..	1	—
			<hr/> 323	<hr/> 19

Total samples analysed during year .. 342

Out of the above 28 samples of milk, 7 of butter, 1 of Malt Vinegar, 1 of Ground Rice, 1 of Tartaric Acid, and 1 of Rum were reported adulterated, and proceedings were taken in respect of 18 samples of milk, 1 of Butter, 1 of Malt Vinegar and 1 of Rum.

With reference to the remaining samples reported adulterated the Health Committee considered it was inadvisable to institute proceedings, and the particulars of the respective cases and the circumstances which determined the Committee's decision are as follows, viz. :—

Milk samples Nos. 32 and 50.

In these cases the milk was reported to be deficient in fat to the extent of 3 per cent. and 2 per cent. respectively, and as the amounts were small the vendors were given an opportunity of furnishing explanations to the Health Committee and they were subsequently cautioned.

Butter samples Nos. 77 and 91.

Sample No. 77 was reported to contain 17.26 per cent. of water, and upon a sample (No. 91) being taken in course of delivery from the wholesale dealer to the local shopkeeper an amount of water equal to 16.65 per cent. was reported to be present or 0.65 per cent. above the amount allowed by "The Sale of Butter Regulations, 1902."

Inquiry was made into the matter when it was found the butter was of Irish manufacture, and full particulars respecting the samples were subsequently supplied to the Board of Agriculture and Fisheries.

Rice sample No. 99.

This sample was reported to contain 0.4 per cent. of added mineral matter (Talc). As, however, this quantity was below the percentage named by Dr. J. H. Hamill in his Report of the 21st May, 1909 to the Local Government Board, *i.e.*, 0.5 per cent. as being ample to meet the requirements of

traders who represent the practice of facing and polishing rice as necessary, the Health Committee decided not to institute proceedings but to call the attention of the vendor to the matter.

Milk sample No. 116.

In this case the milk was reported to be deficient in fat to the extent of 5 per cent., but as the total solids in the milk were found to be above 11.5 per cent., the amount fixed by the Board of Agriculture and Fisheries, it was not considered advisable to institute proceedings, but the attention of the vendor was directed to the deficiency.

Milk sample Nos. 128 and 137.

Sample No. 128 was reported to contain 3 per cent. of added water, and upon a sample (No. 137) being obtained in course of delivery from the farmer, the milk upon analysis was found to exactly correspond. Under these circumstances the Health Committee decided not to institute proceedings but the attention of the farmer was called to the inferior quality of the milk.

Milk sample No. 139.

This sample was reported to contain 2.6 grains of Boric Acid per pint, and the vendor was afforded an opportunity of furnishing an explanation, which after consideration was accepted.

Butter samples Nos. 174 and 176.

Sample No. 174 was reported to contain 17.66 per cent. of water and upon a sample (No. 176) being taken in course of delivery from the wholesale dealer to the local shopkeeper, an amount of water equal to 20.54 per cent. was reported to be present.

Upon making further enquiries into the matter it was found that as the local shopkeeper purchased the butter in Liverpool and undertook its removal to Birkenhead. The

"place of delivery" was apparently in Liverpool, and consequently proceedings could not be instituted against the wholesale dealers. The butter was of Irish manufacture, and a full report was forwarded to the Board of Agriculture and Fisheries for the information of the Board.

Milk sample No. 195.

This sample of milk was reported to be deficient in fat to the extent of 5 per cent., and after due consideration of the circumstances connected therewith, the Health Committee did not think it advisable to institute proceedings.

Butter sample No. 214.

In this case the butter was reported to contain 16.22 per cent. of water, or 0.22 per cent. above the amount allowed by "The Sale of Butter Regulations, 1902."

The amount of adulteration being small the vendor was cautioned.

Milk sample No. 227.

This sample was reported to be deficient in fat to the extent of 2 per cent. and the Health Committee decided that the vendor be cautioned.

Tartaric Acid sample No. 234.

In this case the Tartaric Acid was reported to contain 0.26 per cent. of ash (mineral matter), consisting mainly of Sulphate of Lime.

The Health Committee after full consideration decided to call the attention of the vendor (a grocer) to the matter rather than to institute proceedings.

Milk sample No. 247.

This sample of Milk was reported to be deficient in fat to the extent of 4 per cent., and the deficiency being small the vendor was cautioned.

Butter sample No. 277.

In this case the Butter was reported to contain 16.30 per cent. of water, or 0.30 per cent. above the amount allowed by "The Sale of Butter Regulations, 1902," but as this excess of water was small the Health Committee decided not to institute proceedings but to send full particulars respecting the sample to the Board of Agriculture and Fisheries.

INFORMAL SAMPLES.

All the samples taken informally for Analysis during the year were found pure, with the exception of :—

Milk sample No. 18.

This sample was reported to be deficient in 10 per cent. of its fat. A formal sample was taken which was found to be genuine, it was decided therefore to keep the vendor under observation, and to take further samples.

Milk samples Nos. 27, 46 and 47.

In connection with these samples it may be explained that sample No. 27 was purchased from a small shopkeeper in the Borough, and Samples Nos. 46 and 47 were taken in course of delivery from a farmer supplying the shopkeeper.

When the cases came before the Court the Magistrates dismissed the Summons against the shopkeeper, but fined the farmer 10/- and 19/- costs in the case of sample No. 46, and ordered him to pay the costs, *i.e.*, 16/6 in the case of sample No. 47.

Milk sample No. 57.

In this case the purveyor of milk alleged that he sold the article as "Machined-skimmed milk," but the Magistrates after hearing the evidence convicted and fined him 1/- and 14/6 costs.

The Magistrates also fined the defendant 2/6, including costs, for carrying on the trade of a purveyor of milk without being registered.

Milk samples Nos. 54, 58, 59 and 60.

In connection with these four samples it may be explained that sample No. 54 was purchased from a shopkeeper in the Borough, sample No. 58 was taken in course of delivery by a local milk dealer to the aforesaid shopkeeper and samples Nos. 59 and 60 at the railway station in course of delivery from the farmer to the milk dealer.

When these cases came before the Court the Magistrates fined the shopkeeper 1/- and 17/- costs, dismissed the summons against the milk dealer upon warranty, and fined the farmer £1 and 19/- costs in each of the two cases Nos. 59 and 60.

Milk samples Nos. 142 and 150.

In the case of these samples, No. 142 was purchased from a local shopkeeper and No. 150 was taken in course of delivery from a farmer to the said shopkeeper.

The case against the shopkeeper was withdrawn upon the production of a warranty and with the consent of the Magistrates, who convicted and fined the farmer £1 and 19/- costs.

Milk samples Nos. 186 and 190.

Sample No. 186 was purchased from a local shopkeeper and sample No. 190 was taken at the railway station from a farmer supplying the said shopkeeper.

On the hearing of these cases the shopkeeper produced a warranty when the summons against him was dismissed, the farmer, however, was convicted and fined £1 and 19/- costs.

Milk sample No. 224.

In this case the Magistrates decided after hearing the evidence that "the justice of the case would be met by dismissing it on payment of costs, *i.e.*, 14/6."

The particulars respecting the samples in which proceedings were taken are as follows:—

Quarter Ending.	Article.	No.	Amount of Adulteration.	Fine Inflicted.	Costs Imposed.
1914.				£ s. d.	£ s. d.
March 31	Milk ..	25	5½% of added water..	Dismissed upon payment of costs.	0 15 6
	Milk ..	26	7½% of added water..	Dismissed upon payment of costs.	0 15 6
	Milk ..	27	5% of added water ..	Dismissed	—
	Milk ..	46	5.3% of added water	0 10 0	0 19 0
	Milk ..	47	3.2% of added water	Dismissed upon payment of costs.	0 16 6
	Milk ..	54	Deficient in fat to the extent of 8%	0 1 0	0 17 0
	Milk ..	57	Deficient in fat to the extent of 94% ..	0 1 0	0 14 6
	Milk ..	58	Deficient in fat to the extent of 6%	Dismissed on watrrany.	—
	Milk ..	59	Deficient in fat to the extent of 16% ..	1 0 0	0 19 0
	Milk ..	60	Deficient in fat to the extent of 12% ..	1 0 0	0 19 0
	Butter	132	Foreign fats 74.39%	0 10 0	0 17 0
June 30	Milk ..	142	5.9% of added water	Withdrawn on warranty.	—
	Milk ..	143	Deficient in fat to the extent of 7%	0 3 0	0 17 0
	Milk ..	150	7.3 of added water..	1 0 0	0 19 0
September 30 ..	Milk ..	158	Deficient in fat to the extent of 9%	0 10 0	0 17 0
	Milk ..	182	Deficient in fat to the extent of 20% ..	0 10 0	0 17 0
	Milk ..	186	10% of added water	Dismissed on warranty.	—
	Milk ..	190	7% of added water	1 0 0	0 19 0
	Malt Vinegar	199	20% of added water	0 5 0	0 17 0
	Milk ..	224	11% of added water	Dismissed upon payment of costs.	0 14 6
December 31 ..	Rum ..	285	32% under proof ..	5 0 0	0 17 0

PUBLIC HEALTH (Milk and Cream) REGULATIONS, 1912.**Report for the Year ended 31st December, 1914.****1. Milk and Cream not sold as Preserved Cream.**

	(a) Number of samples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk ..	137	1
Cream ..	—	—

(b) With reference to the sample of Milk reported to contain Boric Acid and sold contrary to the provisions of the Regulations, the vendor was afforded an opportunity of furnishing an explanation in writing. After duly considering the explanation and all the circumstances in connection therewith, the Local Authority decided to caution the vendor.

2. Cream sold as Preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservative were correct :—

(1) Correct statements made.. 4

(2) Statements incorrect .. 0

Total .. 4

(b) Determination made of Milk fat in Cream sold as Preserved Cream :—

(1) Above 35 per cent .. 4

(2) Below 35 per cent. .. 0

Total — .. 4

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V (2) of the Regulations have not been observed :—

Article V. (1) nil

Article V. (2) nil

(d) Particulars of each case in which the Regulations have not been complied with and action taken :—Nil.

3. Thickening Substances.

The Public Analyst has not found any evidence of the addition of any thickening substance to the samples of Cream or Preserved Cream which have been analysed.

4. Other observation, if any.

Nil.

COMPOSITION OF MILK SAMPLES.

The following Schedule shews the composition of each sample of Milk analysed during the year ending 31st December, 1914.

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of solids not Fat.
Jan. 29	13	3.45	8.75
	14	3.42	8.79
	15	3.38	9.26
	16	3.80	9.15
	17	3.40	9.07
	18	2.69	9.18
Feb. 2	19	3.19	9.40
	20	3.15	9.16
	21	3.80	8.78
	22	2.97	8.76
	23	3.45	8.76
	24	3.55	8.93

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of solids not Fat.
Feb. 3	25	3.38	8.03
	26	3.45	7.85
Feb. 13	27	3.80	8.07
	28	3.60	8.94
	29	3.65	8.85
	30	3.78	8.95
	31	3.45	8.51
	32	2.91	8.58
Feb. 19	38	3.35	8.72
Feb. 20	39	3.16	8.45
Feb. 23	40	3.15	8.89
	41	3.73	9.08
	42	2.97	8.91
	43	3.00	8.88
	44	3.02	9.00
	45	3.00	9.38
Feb. 24	46	3.30	8.05
	47	3.45	8.23
	48	3.65	8.71
	49	3.35	8.86
	50	2.94	8.61
	51	3.55	8.88
	52	3.80	9.36
	53	3.50	8.67
	54	2.76	9.08
	55	3.90	8.78
	56	4.00	8.72
	57	0.18	9.07
Feb. 28	58	2.82	8.80
Mar. 4	59	2.50	8.89
	60	2.64	8.90
April 2	100	3.30	8.88
	101	3.80	9.25
	102	4.05	9.06
	103	5.00	8.91
	104	3.20	9.01
	105	3.90	9.02

Date of Sample.		Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of solids not Fat.
April	7	114	3.15	9.31
		115	3.15	8.77
		116	2.85	8.86
		117	4.10	9.22
		118	3.50	8.74
		119	3.20	8.84
April	14	121	3.93	8.86
		122	3.58	8.94
		123	3.48	8.72
April	17	124	5.05	9.12
		125	4.85	8.84
		126	3.80	8.82
		127	3.50	8.59
		128	3.40	8.25
		129	3.23	8.87
April	20	135	3.85	9.35
April	21	136	3.60	8.68
April	23	137	3.30	8.26
June	12	138	4.00	8.95
		139	3.42	8.56
		140	3.55	8.83
		141	4.70	8.86
		142	3.64	8.00
		143	2.79	8.91
June	17	150	3.58	7.88
July	3	157	3.20	8.51
		158	2.73	8.75
		159	3.04	8.74
		160	3.83	9.25
		161	3.40	9.16
		162	3.40	9.16
July	8	169	3.18	8.80
July	22	177	3.30	8.80
		178	3.55	9.00
		179	6.50	8.65
		180	4.40	8.99
		181	4.05	9.17

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of solids not Fat.
July 22	182	2.40	8.45
July 24	183	3.27	9.24
	184	3.50	9.12
	185	3.40	8.59
	186	3.98	7.64
	187	3.90	8.53
	188	3.60	8.73
July 28	189	3.75	8.80
July 30	190	3.84	7.90
Aug. 18	191	3.46	8.66
	192	3.90	8.46
	193	4.30	8.96
	194	3.01	8.41
	195	2.85	8.95
	196	3.00	8.75
Aug. 27	197	3.90	8.61
Sept. 16	220	3.39	8.83
	221	4.30	9.08
	222	5.75	8.51
	223	4.95	8.92
	224	3.08	7.56
	225	3.37	9.10
Sept. 21	226	4.23	8.59
Sept. 22	227	2.94	8.74
	228	2.98	9.12
	229	7.65	8.80
	230	3.00	8.83
	231	3.00	9.24
	232	3.32	9.25
Sept. 28	239	4.37	8.98
	240	4.13	9.08
	241	3.47	9.08
	242	3.12	9.23
	243	3.70	8.44
	244	4.37	8.98
	245	3.76	8.99
Sept. 28	246	4.00	9.00

Date of Sample.	Identification Number given in Quarterly Report.	Percentage of Fat.	Percentage of solids not Fat.
Sept. 29	247	2.88	9.04
Sept. 30	251	3.75	8.94
	252	4.57	9.16
Oct. 21	267	5.78	8.85
	270	3.86	8.65
Oct. 27	271	3.91	8.56
	272	4.60	8.98
	273	3.42	9.02
	274	3.92	8.60
	275	5.98	9.00
	276	3.67	8.78
Nov. 30	310	3.96	8.75
Dec. 30	341	3.68	8.61
	342	3.50	8.92

AVERAGE PERCENTAGE :—Fat, 3.62 ; Solids not Fat, 8.81.

Dairies, Cowsheds and Milkshops' Regulations.

Proceedings were instituted in one case for an infringement under Section 6 of these Regulations and the defendant was convicted and fined 2/6, including costs.

Contagious Diseases (Animals) Act, 1886.

The Milkhouses.—The regulation of dairies, cowsheds, and milk-shops, and the supervision of milk-sellers, has had systematic attention for a number of years. Special care is taken that the ventilation, lighting, cleansing, draining, and water supply of premises used for milk-trade are thoroughly efficient. The register of milk-sellers is revised week by week. The total number of milk-shops is 200, in addition there are 36 purveyors of milk, 11 cowsheds, and 42 farmers resident outside the Borough, registered to purvey milk inside the Borough.

Twice every year notice is sent to all the milk-sellers requiring that the walls and ceilings of every room in the occupation of Registered Milk-sellers, used for storage or sale of milk, shall be lime-washed, that is to say, in March and September ; but if the walls are painted, then they must be washed and thoroughly cleansed twice every year, in March and September.

Meteorological Results.

The noteworthy features of the meteorology of the year are given in the following tabular statement, which has kindly been prepared by W. E. Plummer, Esq., M.A., F.R.A.S., Director of the Observatory, Bidston Hill, Birkenhead, who also furnishes particulars weekly of the daily observations taken under his directions, from which Table IV. in the appendix is compiled.

LIVERPOOL OBSERVATORY, BIDSTON, BIRKENHEAD.

1914.	Mean Tempera- ture	Mean Barometer	Rainfall. 1 ft. above ground
	°F	Inches	Inches
January	40·3	30·128	1·020
February	44·5	29·600	1·295
March	43·6	29·566	2·617
April	49·7	30·051	0·546
May	50·9	30·096	1·482
June	57·8	30·071	2·144
July	60·8	29·859	4·156
August	61·5	29·997	1·325
September	56·9	30·058	2·622
October	51·5	30·035	1·711
November	45·7	29·835	2·761
December	40·6	29·499	4·338

Mean Barometer for the whole year 1914 = 29·900 inches.

Mean Barometer for the past 47 years = 29·922 inches.

Number of wet days in the year 1914 = 190 days.

Total amount of rainfall at Bidston 1914 = 26·017 inches.

Average rainfall for last 47 years = 28·464 inches

Mean Temperature for the year 1914 = 50·3

Average mean temperature for last 47 years = 49°·1.

Barometer.—The mean barometer of 1914 (29·900 inches) was lower than last year and 0·022 lower than the average mean for the last 47 years. Detailed particulars respecting

the barometric pressure, temperature, rainfall, wind, humidity of the air and the proportion of cloud to clear sky, &c., will be found in Table IV.

Rainfall.—The rainfall of 1914, 26.017 inches, was higher than last year, but lower than the average of the previous forty-seven years.

Year.	Total Amount Rainfall in inches at Bidston	No. of wet days in the year
1901.....	25.192	190
1902.....	25.566	200
1903.....	34.418	224
1904.....	25.177	196
1905.....	24.011	192
1906.....	28.076	196
1907.....	26.568	209
1908.....	28.902	190
1909.....	28.447	202
1910.....	28.585	227
1911.....	25.265	170
1912.....	30.170	209
1913.....	25.888	205
1914.....	26.017	190

The figures for the years 1867 to 1899 are given in my Report for 1904.

Water Supply.—The water supply of the Borough is from deep wells in the old red sand stone, and is of excellent quality. Annual Reports are regularly issued by the Water Engineer.

PREVALENCE OF ZYMOTIC SICKNESS DURING 1914.

Notification of Cases of Dangerous Infectious Diseases.—The Infectious Diseases Notification Act, 1889, requires householders and medical men in attendance to notify cases of dangerous infectious diseases to the Sanitary Authority, and gives facilities for supplementing the statement of the mortality from zymotic diseases, month by month, as they were reported. The diseases which require to be notified to the Authority as “dangerous infectious diseases” are:—

Small-pox.	Fevers	Typus.
Scarlatina.		Typhoid.
Diphtheria.		Continued.
Membranous Croup.		Relapsing.
Erysipelas.		Puerperal Septicæmia.
Cerebro Spinal		Acute Poliomyelitis.
Meningitis.		Cholera.

The cases notified appear in the following return, showing that 621 cases were notified during the year, being 150 less than the number notified last year.

The notification of Measles was discontinued after 7th August, 1907.

The following Table gives the number of Notifications of Dangerous Infectious Diseases in each month of the year.

1914.	Smallpox	Scarlatina	Diphtheria	Typhus	Typhoid	Puerperal Fever	Fever	Mem. Croup	Erysipelas	Poliomyelitis	Cerebro Spinal Men.	Cholera	TOTAL
January	—	63	9	—	1	—	—	1	10	—	1	—	85
February ...	—	54	11	—	1	—	—	—	10	—	—	—	76
March	—	35	10	—	1	1	—	2	13	—	—	—	62
April	—	41	10	—	—	—	—	2	10	—	—	—	63
May	—	32	11	—	2	1	—	2	3	—	—	—	51
June	—	20	12	—	3	1	—	—	4	—	—	—	40
July	—	20	8	—	1	—	—	—	2	—	—	—	31
August	—	20	7	—	1	—	—	—	4	—	—	—	32
September ..	—	25	7	—	5	1	—	—	10	—	—	—	50
October	—	22	15	—	4	—	—	1	4	2	—	—	48
November ..	—	20	8	—	3	2	—	1	14	—	—	—	48
December ..	—	19	8	—	—	—	—	1	7	—	—	—	35
	—	371	116	—	22	6	—	10	91	4	1	—	621

And the next Table the number of cases of the different diseases notified in each year during the last eleven years.

The statement is as follows :—

Year.	Smallpox	Measles	Scarlatina	Diphtheria	Typhus Fever	Typhoid Fever	Fever	Mem. Croup	Erysipelas	Poliomyel- itis	Cerebro Spinal Meningitis	Cholera	TOTAL
1904	40	2212	627	97	1	103	21	17	70	—	—	—	3188
1905	2	979	874	138	—	63	8	15	64	—	—	—	2143
1906	2	920	869	178	—	118	11	21	95	—	—	—	2214
1907	1	2287	288	212	—	70	7	15	73	—	—	—	2953
1908	5	—	454	140	1	62	10	11	94	—	—	—	777
1909	1	—	644	132	1	46	13	17	61	—	—	—	915
1910	7	—	291	130	—	30	5	10	89	—	—	—	562
1911	1	—	415	170	—	38	9	8	73	—	—	—	712
1912	—	—	790	131	—	23	19	10	82	—	—	—	1055
1913	1	—	531	139	—	19	11	4	64	1	1	—	771
1914	—	—	371	116	—	22	6	10	91	4	—	—	621

The figures for the years 1882-1905 will be found at page 25 in my report for 1905.

Small-pox.

No cases of Small-pox were notified during the year.

The approximate estimate of dwelling-houses of all descriptions within the Borough, including Institutions, at 31st December, 1914 26,721

The approximate estimate of schoolrooms, warehouses, &c. 1215

I am indebted to the Borough Surveyor for the following information relating to the

Number of New Houses erected in the Borough.

April 1st, 1911, to December 31st, 1913.. 814

January 1st to December 31st, 1914 .. 246

The number of houses demolished since taking of Census in 1911 was 132, namely, 3 in 1911, 44 in 1912, 67 in 1913, and 18 in 1914, a net gain of 928.

The following Table gives particulars respecting Erection of New Houses and Demolition of Houses in the Borough during each year from 1892 to 1914 :—

Year		New Houses Erected	Houses Demolished	Net Increase
1892		99	..	..
1893	Average	108	..	..
1894	per year	139	..	..
1895	130	175	..	..
		<hr/> 521	<hr/> 81	<hr/> 440
1896		255	8	247
1897		349	6	343
1898	Average	438	125	313
1899	per year	434	28	406
1900	385.9	408	81	327
1901		420	66	354
		<hr/> 2304	<hr/> 314	<hr/> 1990

[Carried forward.]

1902		646	10	636
1903		897	10	887
1904	Average	643	8	635
1905	per year	848	152	696
1906	677.3	472	35	437
1907		685	14	671
1908		550	52	498
		<hr/> 4741	<hr/> 281	<hr/> 4460
1909		293	77	216
1910	Average	255	7	248
1911	per year	232	9	223
1912	273	273	44	229
1913		339	67	272
1914		246	18	228
		<hr/> 1638	<hr/> 222	<hr/> 1416
TOTALS		<hr/> 9204	<hr/> 898	<hr/> 8306

I am again able to repeat that the Health returns and the Birth and Death rates for the Borough are in every way satisfactory, and compare very favourably with those of the surrounding towns and the country generally.

The following Table gives the estimated Midsummer Populations of the Wards 1911 to 1920.

WARDS.	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Argyle ..	15154	15405	15661	15921	16186	16451	16724	17007	17291	17577
Grange ..	26387	26825	27271	27724	28185	28654	29130	29614	30106	30606
Cleveland	23812	24207	24609	25033	25449	25872	26302	26738	27183	27634
Claughton	8047	8179	8315	8445	8586	8728	8873	9020	9170	9329
Oxton ..	4801	4887	4968	5050	5134	5221	5308	5396	5484	5575
Clifton ..	24012	24411	24817	25229	25649	26076	26509	26948	27397	27852
Egerton ..	17264	17550	17841	18137	18439	18746	19058	19374	19696	20022
Mersey ..	8288	8425	8566	8708	8852	9000	9149	9301	9454	9611
Bebington	3573	3632	3692	3749	3811	3874	3940	4005	4072	4139
Whole Borough ..	131338	133521	135740	137996	140291	142622	144993	147403	149853	152345

VITAL AND MORTAL STATISTICS FOR THE YEAR.

Area.—The Borough has an area of 3,850 acres, or a little more than six square miles.

Population.—The Census was taken in England and Wales on April 2nd, 1911, and showed the number of persons in Birkenhead to be 130,794, being 19,879 more than the number shown in the Census taken on April 1st, 1901.

For the purposes of this Annual Report an estimate is required of the number of persons living at Midsummer, 1914, and I have estimated that on the 30th June of that year the population was 137,996, and on this estimate have based the following statistics.

At the time of the 1901 Census the number of inhabited houses was 19,744, giving an average number of persons per house of 5.6; the number of houses in the Borough at the time of the 1911 Census was 24,343, giving an average number of persons per house of 5.3.

I am indebted to the Chief Constable for the following Return of uninhabited property in the Borough of Birkenhead for the half year ending 31st December, 1914 :—

District	Half-year ended 31st Dec., 1914.					Half-year ended 30th June, 1914.				
	Private Houses	Shops	Cot-tages.	Dock Cot-tages.	Total.	Private Houses.	Shops	Cot-tages.	Dock Cot-tages.	Total.
Birkenhead...	79	78	63	—	220	89	96	73	—	258
Claughton and Oulton	87	22	1	70	180	91	16	9	76	192
Tranmere and Bebington...	72	41	4	—	117	80	29	10	—	119
Totals	238	141	68	70	517	260	141	92	76	569

Total uninhabited and unoccupied property, 31st December, 1913, was 603, so there was a decrease of 86 at the end of 1914 as compared with the previous year.

Births and Deaths in Birkenhead.—During the year 1914 the returns of the local registrars recorded 3,792 births and 2,153 deaths in the Borough of Birkenhead. The natural increase in the population in 1914 was therefore 1,639. Of the births 1,879 were males and 1,913 were females; of the deaths 1,153 were males and 1,000 were females.

Further particulars as to the births and deaths in the Borough registered in each quarter of the year, and in each township are given in the subjoined table. Those occurring in Union Workhouse are entered separately. Twenty births have been subsequently transferred by the Registrar General to other districts. These have not been deducted in the following table, but 2 births sent to us by the Registrar General have been included. This table is made up week by week.

BIRTHS.	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1914		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	261	302	284	282	287	274	290	251	1092	1109	2201
Claughton	16	15	29	17	22	25	21	22	88	79	167
Tranmere	142	190	169	189	167	162	162	127	640	668	1308
Oxton	1	7	9	7	6	7	2	5	18	26	44
Bebington	6	5	3	4	8	4	10	4	27	17	44
Union Hospital ...	7	5	1	2	4	3	2	4	14	14	28
Birkenhead Borough	433	524	495	501	494	475	457	413	1879	1913	3792

DEATHS.	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1914		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	143	111	125	94	145	124	194	179	607	508	1115
Claughton	15	16	5	10	12	11	8	15	40	52	92
Tranmere	76	68	64	62	66	52	91	84	297	266	563
Oxton	5	4	8	7	1	8	5	9	19	28	47
Bebington	4	4	..	5	4	2	6	6	14	17	31
Union Hospital ...	47	35	43	30	35	25	51	39	176	129	305
Birkenhead Borough	290	238	245	208	263	222	355	332	1153	1000	2153

The next table shows the revised estimated population of Birkenhead, the density of population and the number of births, deaths and zymotic deaths, and also the birth and death rates deducible from these figures for the years 1900 to 1914. These figures for the years 1878 to 1899 were given in my reports for the years 1898 and 1899. This table has been revised since the figures of the 1911 Census have been published.

Year	Revised Estimated Population at Midsummer	Persons per acre.	BIRTHS.		DEATHS.		ZYMOTIC DEATHS.	
			Number of Births.	Birth rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum
1900	110042	28.5	3428	31.1	1965	17.8	209	1.8
1901	111377	28.9	3230	29.0	2061	18.5	353	3.1
1902	113231	29.4	3646	32.1	1989	17.5	270	2.3
1903	115117	29.9	3516	30.5	1937	16.8	260	2.2
1904	117034	30.3	3305	32.5	2232	19.4	465	3.9
1905	118982	30.9	3707	31.1	1833	15.4	239	2.0
1906	120964	31.4	3733	30.8	2078	17.1	371	3.0
1907	122978	31.9	3727	30.3	1829	14.8	253	2.0
1908	125026	32.4	3775	30.1	1929	15.4	267	2.1
1909	127108	33.0	3737	29.4	1930	15.1	180	1.4
1910	129227	33.5	3730	28.8	1993	15.4	251	1.9
1911	131377	34.1	3732	28.4	2107	16.0	334	2.3
1912	133521	34.6	3774	28.2	1964	14.7	197	1.4
1913	135740	35.2	3907	28.7	2032	14.9	205	1.5
1914	137996	35.8	3772	27.3	2153	15.6	244	1.7

Infantile Mortality during 11 years, 1904 to 1914.

Year.	No. of Births	Total Deaths of Infants under 1 year.	Deaths from Diarrhoea under 1 year.	Total Deaths of Infants per 100 Births.	Deaths of Infants from Diarrhoea per 1000 Births.
1904	3205	688	136	120	35.7
1905	3707	481	88	129	23.7
1906	3733	565	152	151	40.7
1907	3727	410	30	110	8.0
1908	3775	516	67	136	17.7
1909	3737	458	33	122	8.8
1910	3730	507	56	135	15.0
*1911	3732	509	134	136	35.9
*1912	3774	371	20	98	5.2
*1913	3907	458	68	117	17.4
*1914	3772	462	36	122	9.5

* This is the revised rate after the Registrar General has transferred births from other towns. It cannot be compared with other towns unless we had all their revised rates.

Causes of Infantile Mortality during the past 10 years (1905 to 1914).

(DEATHS UNDER ONE YEAR).

Cause of Death.	YEARS.									
	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Chicken-pox	1	—	—	1	2	—	—	—	—	4
Measles	5	1	42	11	7	7	5	7	2	12
Scarlet Fever	1	—	1	—	1	—	—	—	—	—
Diphtheria & Membranous Cr'p	3	4	—	1	1	—	1	2	4	1
Whooping Cough	—	33	7	27	6	27	13	20	15	16
Diarrhœa	88	152	30	67	33	56	134	20	68	36
Enteritis	19	24	8	15	24	42	24	19	64	53
Gastritis	13	7	7	12	9	11	7	5	12	2
Premature Birth	71	68	61	81	58	65	53	60	50	67
Congenital Defects	10	13	12	17	15	13	24	17	15	17
Teething	3	5	6	2	4	5	7	4	6	4
Inanition and Privation	9	5	7	11	21	21	10	17	11	10
Debility	63	83	78	64	82	66	65	70	81	80
Tabes Mesenterica	11	9	10	11	15	5	5	1	2	2
Other Tubercular Diseases	12	9	9	12	12	16	14	8	10	8
Erysipelas	1	1	—	—	2	1	—	2	—	3
Syphilis	—	4	1	3	2	4	1	2	6	7
Rickets	2	1	2	—	2	—	1	—	1	1
Meningitis (not tuberculous) ..	12	11	7	11	9	5	7	6	5	5
Convulsions	24	23	18	15	13	21	18	9	14	14
Bronchitis	24	16	25	47	36	39	41	24	27	26
Pneumonia	47	45	35	51	55	50	40	31	33	64
Heart Disease	7	2	2	7	9	4	2	9	1	1
Suffocation, overlaying, etc. ..	16	5	9	16	10	8	7	13	8	10
Other Causes	39	44	33	34	30	36	29	25	23	14
Total Deaths per annum ..	481	565	410	516	458	507	509	371	458	462
No. of Births per annum ..	3707	3733	3727	3775	3737	3730	3732	3774	3907	3772
Death Rate per 1000 per annum per 1000 Births	129	151	110	136	122	135	136	98	117	122

Average Death Rate per 1000 per annum, per 1000 Births for the 10 years 1905 to 1914,
equals 125.

Birth rates and Death rates in forty-six great towns in England.—In order that the birth rates and death rates of the Borough of Birkenhead in 1914 may be compared with the corresponding rates of the most populous cities and boroughs in England, the following table gives the *estimated* population of the forty-six large towns at Midsummer, 1914. For comparative purposes these figures are interesting, as they are all calculated on the same basis. (See table on page 66.)

***Table shewing the unrevised Birth Rates and Death Rates,
&c., in 46 great Towns in England and Wales,
in 1914.**

Name of Town.	Population 1914 Midsummer	Death Rate per 1000	Birth Rate per 1000	Infantile Death Rate per 1000 Births
BIRKENHEAD	137996	15.6	27.3	122
Bristol	363312	14.1	20.6	85
Burnley	110040	14.5	21.7	136
Coventry	119003	11.1	22.5	75
Croydon	181956	11.8	21.3	85
Huddersfield	112265	16.3	16.4	142
Hull	291118	15.2	25.1	114
Leeds	459260	14.6	22.4	111
Liverpool	767992	20.9	29.5	153
Manchester	738538	16.0	22.7	130
Newcastle-on-Tyne ..	273415	21.1	24.9	170
Norwich	124107	12.5	19.8	78
Oldham	151044	17.4	21.1	172
Plymouth	113559	17.9	22.3	133
Wallasey	87175	13.9	20.8	129
Wolverhampton	95725	14.0	25.3	93
Birmingham	868430	15.6	25.0	144
Blackburn	134387	15.0	19.4	157
Bolton	185247	13.8	20.7	116
Bootle	73230	16.0	27.9	126
Bradford	291482	15.1	18.2	118
York	83802	13.3	20.8	124
Sunderland	152927	15.2	29.6	120
Stoke-on-Trent	241430	15.7	30.4	117
Wigan	91491	20.3	27.5	153
West Ham	296570	14.7	28.8	147
Warrington	74923	15.3	28.0	88
Southampton	123948	14.5	24.8	89
St. Helens	100775	17.2	30.3	155
Sheffield	476971	15.3	25.6	118
Derby	126389	12.3	23.2	86
Brighton	133936	14.0	16.6	90
Gateshead	119362	18.9	29.6	138
Leicester	232664	13.3	21.4	105
Nottingham	266918	15.7	22.2	164
Portsmouth	245827	12.3	20.5	87
Salford	234975	17.2	24.1	146
Preston	118514	16.0	21.4	128
Rochdale	94320	13.7	17.4	125
Stockport	126040	14.1	19.7	120
Cardiff	188495	14.0	23.5	109
Middleborough	126452	17.2	26.2	133
South Shields	111357	15.0	30.1	110
Rhondda	166365	15.6	30.9	156
Swansea	121665	13.3	25.7	142
London	4516612	15.3	23.4	123
97 Great Towns ..	18120059	14.9	23.3	117

* Compiled from the British Medical Journal's return.

The proportion of Deaths of Infants under One year to the Births registered.—The proportion in Birkenhead Borough in 1914 was equal to 122 per 1,000, and compares very favourably with that of other towns. The average infantile mortality for the 97 great towns of England and Wales was 117 per 1,000 births. The rate varied greatly in the different towns in the N.W. District—from 172 in Oldham, 156 in Blackburn, 155 in St. Helens, 153 in Wigan and Liverpool, 129 in Wallasey, 128 in Preston, 126 in Bootle and 122 in Birkenhead, &c.

Tabular Statements.—In the appendix to this Report are tabular statements of the year's mortality within the Borough, classified according to the diseases, ages and localities, a weekly register of deaths and of meteorological results, together with a return of the deaths in the Birkenhead Union Hospital and Workhouse, &c.

Table I. shows the deaths registered in the whole Borough during 1914, arranged with reference to the age at which death occurred in each case. They are disposed in four sub-tables—the deaths in the townships of Birkenhead and Claughton in the first, deaths in Tranmere (exclusive of the Union premises) and Oxton in the second, the deaths in the incorporated portion of Higher Bebington in the third, and the deaths in the Union Hospital and Workhouse in the fourth. The deaths of infants are entered up in three columns—those under one year, those of one year and under two years, and those turned two years and under five. Then follow the deaths of children and young persons, those turned five years and under twenty; and of adults those turned twenty and under forty, and those turned forty and under sixty. In the last two columns are the deaths of old people, those turned sixty and under eighty, and those of eighty and upwards. Reference to this table will show that, of the gross local mortality for 1914, the deaths of infants under one year of age accounted for 462, those over one year but under five years of age 330, children and young persons 131,

adults 649, old people sixty years of age and upwards 581.

The relative proportion of deaths in 1914 among the infants, children and young persons, adults and old people, to the whole number of deaths, in certain sub-divisions of the Borough, in the premises controlled by the Guardians of the Poor, and in the entire incorporated area, is readily shown in tabular form, thus :—

Percentage of Deaths at certain ages to Total Deaths	Under 1 Year	Age between														85 years and upwards.
		1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75-85	
Birkenhead and Claughton	15.23	6.17	2.13	1.06	0.97	1.48	1.16	1.20	1.20	3.25	2.97	5.06	5.62	4.92	3.20	0.37
T'mere & Oxtou	5.24	2.09	1.25	0.46	0.46	0.65	0.51	0.23	0.46	1.43	2.46	2.36	3.39	4.13	2.36	0.78
Bebington.....	0.13	..	..	..	..	..	..	..	..	0.09	0.09	0.23	0.18	0.41	0.23	0.04
Union Hospital and W'house ..	0.83	0.46	0.13	..	0.04	0.13	0.23	0.46	0.51	1.06	1.52	2.41	1.90	2.55	1.43	0.37
Birkenhead Borough	21.45	8.73	3.57	1.52	1.48	2.27	1.90	1.90	2.18	5.85	7.05	10.07	11.10	12.02	7.24	1.57

In this respect the local mortality compares favourably with the mortality in most great cities and boroughs. The percentages taken out for Bebington have little significance, the number of deaths being so small.

The Registrar General states that the factor for correcting the general death rate for Birkenhead for the intercensal period, 1912—1921, is 1.0324.

Table II. is the weekly register of deaths in the Borough of Birkenhead for 1914. The deaths are entered into three sub-tables, representing Birkenhead ; Claughton, Tranmere, Oxtou and Bebington, and the Union Hospital and Workhouse. Table III. is a summary of the weekly register of deaths. Table IV. is a Weekly Condensed Register of Meteorological Results. Table V. is a street register of deaths.

The Classification of Death Causes.—The causes of death, as they appear in Tables I. and II. in the appendix, are systematically classified according to the principles laid down by the late Dr. W. Farr, the nosology being that adopted by the Registrar General until within the last few years, which

experience has shown to be well suited for statistical purposes. The death causes are arranged under classes and orders, the latter corresponding to the families of Natural History. Genera, or what in diseases would be varieties, are not distinguished. All death causes are thus conveniently classified under 140 heads, some of which, however, include diseases very distinct from one another.

At the beginning of Table I. are the totals of deaths from all causes, and on the next line the totals of deaths from specified causes. The deaths which it is necessary to refer to unspecified causes are not only those ascribed in legal phraseology, to "visitation of God" or "natural causes," but those which, with almost equal vagueness, are classified as due to "tumour," "coma," etc. The deaths from specified causes are then divided into five classes. Class I. (the zymotic) embraces all diseases, either epidemic, endemic or contagious, which are induced by some specific body, or by want of, or by the bad quality of food. The diseases coming under Class II. (constitutional or cachetic) appear to be due to a bad habit of body, and possibly may sometimes be hereditary. Class III. takes in diseases the effects of which are manifest in disturbing or obliterating the function of particular organs or systems. Class IV. includes the conditions tending to produce death which are the incidental results of the formative, reproductive and nutritive processes. Class V. groups together all deaths which are the evident and direct result of physical or chemical forces.

Deaths from Zymotic Diseases.—The deaths from zymotic disease include 95 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz., measles 67, scarlatina 6, diphtheria 11, membranous croup 5, fevers 4, and puerperal septicæmia 2. The remaining 149 were entered to what have been called minor zymotics (diseases less prevalent, less fatal, or less obviously zymotic in character), viz., whooping cough 49, erysipelas 5, influenza 21, diarrhœa 48, syphilis 11, and other zymotic diseases 15.

Relative Fatality of Chief Zymotic Diseases.

The following table shows at a glance the relative fatality of the chief zymotic diseases for the year on the corrected estimate of population.

Year.	Deaths from Zymotic Diseases.							Death rate per 1000 living.						
	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhoid Fever	Diarrhoea	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhoid Fever	Diarrhoea
1905	—	32	28	22	1	6	115	—	0·27	0·23	0·18	0·008	0·05	0·98
1906	—	8	31	24	58	17	200	—	0·06	0·25	0·19	0·47	0·14	1·65
1907	—	129	10	21	16	11	42	—	1·04	0·08	0·17	0·13	0·08	0·34
1908	1	44	6	8	60	9	94	0·007	0·35	0·04	0·06	0·47	0·07	0·75
1909	—	41	17	14	15	5	42	—	0·32	0·13	0·11	0·11	0·03	0·33
1910	—	34	5	19	64	10	78	—	0·26	0·03	0·14	0·49	0·07	0·60
1911	—	23	5	21	31	8	194	—	0·17	0·03	0·15	0·23	0·06	1·47
1912	—	52	10	17	49	5	33	—	0·38	0·07	0·12	0·36	0·03	0·24
1913	—	8	4	20	41	1	100	—	0·05	0·02	0·14	0·30	0·007	0·73
1914	—	67	6	16	49	4	48	—	0·49	0·04	0·11	0·35	0·02	0·34

Vaccination.—Mr. S. R. Carter, Clerk to the Board of Guardians of the Birkenhead Poor Law Union, has kindly supplied me with the following *latest completed* information relative to vaccination in the District, viz. :—

From 1st January, 1913, to 31st December, 1913.

No. of Births	..	..	..	..	..	..	3948
Successfully Vaccinated	..	..	..	..	..	..	2926
Insusceptible	..	..	..	..	..	..	6
Had Small-pox	..	..	..	..	..	..	None

Number in respect of whom Statutory Declarations of conscientious objection have been received	..	437
Died Unvaccinated..	..	338
Postponed by Medical Certificate	..	57
Removed to Districts the Vaccination Officers of which were duly notified	..	20
Removed to places unknown or which cannot be reached	..	89
In Abeyance, up to 8th February, 1914..	..	75

Taking 338 who died, and 109 who removed to other districts, 57 postponed by medical certificates, and 6 which

were insusceptible, and 75 in abeyance, from 3948, it leaves 3363 children who could possibly be vaccinated. Of these 2926 were vaccinated, equal to 87 per cent.

It is to be regretted that 437 children were unvaccinated owing to objections on the part of the parents, an increase of 6 on the previous year.

TUBERCULOSIS SUB-COMMITTEE.

ALDERMAN E. G. MASON, *Chairman*.

ALDERMAN M. BYRNE.

ALDERMAN F. NAYLOR.

ALDERMAN THOMAS SHAW.

COUNCILLOR R. FRAME.

TUBERCULOSIS DISPENSARY CONSULTATIVE COMMITTEE

Members of the Tuberculosis Sub-Committee and the following Representatives of the Birkenhead Insurance Committee, viz. :

MR. G. P. SNAPE, (*Chairman of the Insurance Committee*).

MR. T. CRAGG-JAMES.

MR. E. MACDONALD.

CHESHIRE JOINT SANATORIUM COMMITTEE.

The following are the Representatives of the Birkenhead Town Council upon the Committee, appointed pursuant to Article V. of the "Cheshire Joint Sanatorium Committee Order, 1914," viz. :

ALDERMAN MASON.

ALDERMAN BYRNE.

ALDERMAN SHAW.

COUNCILLOR FRAME.

**REPORT ON THE WORK OF THE TUBERCULOSIS
DISPENSARY, 6, DUNCAN STREET, DURING THE
YEAR 1914.**

I have to thank Dr. Cyril Banks, the Tuberculosis Officer, for the following report on the work of the Tuberculosis Dispensary during the year 1914, which may with advantage be prefaced by a brief statement of the object of such work.

A Tuberculosis Dispensary is meant to be the headquarters for the campaign against Consumption and other forms of Tuberculosis in its particular district. Endeavours are made through the medium of the Dispensary to co-ordinate the work of all interested in the campaign, so as to prevent overlapping. The actual medical treatment of Tuberculosis is not a prominent part of the work, but the dispensary acts as a "clearing house" where cases are received and classified according to the stage of their disease, and then, as far as possible, drafted to appropriate institutions for cure, or put in touch with agencies likely to render whatever assistance is most needed. Consumption being a preventable disease it is natural that the dispensary should become a centre for the education of the public in general, and consumptives in particular, as to the methods by which the spread of the disease may be checked; lectures are delivered, pamphlets published and personal instruction given by the members of the dispensary staff. Not all the patients who attend are tuberculous; many of them are suffering from suspicious illness and are referred to the dispensary by their doctors for diagnosis, or for continual observation. A well equipped laboratory for bacteriological investigations forms part of the organisation.

NEW FEATURES.

In the last annual report it was pointed out that the dispensary would only attain its *full* activities and usefulness when the remaining portions of the Corporation's arrangements for the treatment of Tuberculosis were complete, that is to say, when the Hospital at Thingwall and the Joint Sanatorium in the county were available. That statement remains true, but it is satisfactory to note that further developments of the work have taken place. Attention is specially drawn to the acquisition of beds at the Leasowe Sanatorium for Surgical Tuberculosis in Children ; also to the close co-operation which now exists between the Corkhill Charity and the Dispensary. Both these matters receive notice in special paragraphs on another page. Among other advances during the year must be mentioned the facilities now available for supplying not only spitting-flasks, but also Japanese paper handkerchiefs ; and the Corporation's arrangements for erecting open-air sleeping shelters for consumptives are referred to elsewhere.

THE WORK OF THE YEAR 1914.

Changes in the Staff have occurred during the year. Miss Roberts, the Dispensary nurse, relinquished her appointment on her marriage in October, and her place was taken by Miss S. Jones. Mr. Knowles, the clerk, joined the Army soon after war commenced.

I am happy to say that cordial relations have continued to exist with the medical practitioners of the Borough, and also with the various agencies dealing with the sick poor.

The extent of the work carried out is indicated in the tables given below.

STATISTICS AS TO NOTIFICATION OF TUBERCULOSIS (all forms)
during 1914.

Total Notifications	..	..	689
Duplicates	..	..	272
Primary Notifications	..		<u>417</u>

The Notifications were as follows :—

Pulmonary	..	..	..	..	309
Brain	..	..	..	11	
Glands	..	..	..	33	
Bones and Joints	..	..	34		
Peritoneum	..	..	19		
Skin (Lupus)	..	..	5		
Larynx (Primary)	..	..	2		
Bladder	..	..	2		
General	..	..	2		
Total Non-Pulmonary	..	..	..	108	
				<u>417</u>	

PULMONARY TUBERCULOSIS.

Cases in the Borough, December 31st, 1913	..	396
Cases notified during 1914	..	309
Gross total	..	<u>705</u>
*Died during 1914	..	138
Removed from Borough	..	31
Not traceable	..	13
Subsequently found not suffering	..	<u>27</u>
Total Deductions	..	<u>209</u>

Corrected total of known cases of Pulmonary Tuberculosis living in the Borough, December 31st 1914 496

* This number differs from that in the Registrar-General's return on which death-rates are calculated, the latter containing a few transferable deaths from other districts.

INVESTIGATIONS INTO SOURCES OF INFECTION.

Of the 417 cases notified it was possible to secure information on this point in 360 cases.

Cases in which the diagnosis was subsequently found to be incorrect have been omitted.

	Pulmonary	Brain	Glands	Bones & Joints	Peritoneum	Skin	Primary Larynx	Bladder	General
Known to have associated with a person suffering from the disease at home	95	2	4	7	4	1	1	1	1
Known to have associated with a person suffering from the disease at work	5	0	0	0	0	0	0	0	0
Family history of Tuberculosis, but patient not actually in contact ..	35	2	7	7	2	1	0	0	0
No family history of Tuberculosis, and no contact with any known case ..	126	8	18	19	11	1	1	0	1

INCIDENCE OF TUBERCULOSIS ACCORDING TO THE NUMBER OF ROOMS OCCUPIED BY THE FAMILIES.

The investigations detailed below refer to 370 households, at the time of the nurse's first visit

No. in Family	No. Occupying.									
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 room
1	4	..	..	..	..	..	..	..	..	..
2	3	5	2	4	7	..	1	..	..	..
3	5	6	10	10	11	2	..	1	..	..
4	1	6	6	19	24	1	1	2	..	..
5	1	6	7	19	34	3	2	1	..	..
6	1	5	4	16	23	5	3	3	..	..
7	..	1	3	11	25	6	3	2	..	..
8	..	..	1	10	9	4	1	..	3	..
9	..	..	2	6	4	3	..	1	1	..
10	..	..	..	3	3	1	1	..	..	1
11	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	1	..	..	..

OCCUPATIONS

Followed by 220 cases at the time of their notification.

				Pulmonary.	Non-Pulmonary.	Died.
Baker .. ..	..	..	..	2	..	..
Barman .. ..	..	..	..	3	..	..
Blacksmith ..	..	..	..	1	..	1
Boilermaker ..	..	..	..	3	..	1
Bookbinder ..	..	..	..	..	1	..
Bottlewasher ..	..	..	..	2	..	..
Brassfinisher ..	..	..	..	1	..	1
Brewer's drayman	..	..	..	1	..	1
„ traveller ..	..	..	..	1	..	..
Canvasser .. ..	..	..	..	1	..	..
Cardboard boxmaker	..	..	..	..	1	..
Carriage cleaner ..	..	..	..	2	..	..
Carter .. ..	..	..	..	3	1	..
Charwoman .. ..	..	..	..	3	..	1
Checker (docks) ..	..	..	..	1	..	..
„ (railway) .. ..	..	..	..	1	..	..
Chemist .. ..	..	..	..	1	..	..
Clerk .. ..	..	..	..	7	1	..
Coal hawker .. ..	..	..	..	1	2	1
Coalheaver .. ..	..	..	..	2	..	1
Confectioner .. ..	..	..	..	2	..	..
Cotton reeler .. ..	..	..	..	2	..	..
Crane driver .. ..	..	..	..	1	..	..
Domestic servant ..	..	..	..	15	..	1
Dressmaker .. ..	..	..	..	2	1	..
Engine fitter .. ..	..	..	..	2	..	1
Errand boy .. ..	..	..	..	1	..	1
Felt worker .. ..	..	..	..	1	..	..
Fireman .. ..	..	..	..	1	1	1
Flatman .. ..	..	..	..	1	..	..
Foreman (docks) ..	..	..	..	1	..	..
Gardener .. ..	..	..	..	1	..	..

				Pulmonary.	Non-Pulmonary.	Died
Greenkeeper (Golf links)	..			1	..	..
Grocer's Assistant	..	..		1	..	..
Hairdresser	..	..	..	1	..	..
Hawker	..	..	..	1	..	..
Heater	..	..	..	1	..	..
Housewives	..	..	..	53	4	13
Insurance agent	..	..	..	1	..	..
Iron turner	..	..	..	..	1	..
Jam bottler	..	..	..	..	1	..
Labourers—boilermaker's	..			1	..	..
bricklayer's	..			2	..	..
builder's	..	..		1	..	..
dock	..	..		10	..	3
gas works	..	..		2	..	1
general	..	..		4	..	3
oil works	..	..		1	..	..
plater's	..	..		1	..	..
railway	..	..		2	..	1
shipyard	..	..		5	..	1
soap works	..	..		3	..	1
water works	..	..		1	..	1
Label sticker	..	..	..	1	..	1
Laundress	..	..	..	1	1	..
Milk dealer	..	..	..	1	..	..
Milliner	..	..	..	1	..	1
Navvy	..	..	..	1	..	1
Painter	..	..	..	5	..	3
Pawnbroker's assistant	..	..	..	1	..	..
Plumber	..	..	..	3	..	1
Porter (railway)	..	..	..	2	..	..
Quarryman	..	..	..	1	..	..
Rag gatherer	..	..	..	1	..	..
Sailor	..	..	..	2	..	1
Scaler	..	..	..	2	..	..
School teacher	..	..	..	2	1	..

				Pulmonary.	Non-Pulmonary.	Died.
Ship's fireman	..	..	..	3	..	1
Ship's steward	..	..	..	2	..	..
Shipwright	..	..	..	1	1	..
Soap wrapper	..	..	..	2	..	..
Storekeeper	..	..	..	..	1	..
Tailor	..	..	..	1	1	..
Timekeeper	..	..	..	1	..	..
Upholsterer	..	..	..	1	..	1
Van driver	..	..	..	4	..	..
Warehouseman	..	..	..	1	..	..
Watchmaker	..	..	..	1	..	..
Window cleaner	..	..	..	1	..	..
Wood carver	..	..	..	1	..	..

Preventive Work.

The most important part of the preventive work is the home visitation, whereby the patient and his relatives are instructed in the precautions which should be taken to prevent the spread of the disease, and encouraged to adopt the modes of life best calculated to preserve good health. The Visitors, are, on the whole, well received, and the results of their constant supervision over many of the poorer homes have been gratifying.

Number of visits paid :—

Nurse Gibson	..	..	1552
Nurse Roberts	..	..	1138
Total	..	..	<u>2690</u>

Cases of neglect referred to S.P.C.C.	..	..	..	4
Sanitary defects notified to the Medical Officer of Health				27
No. of Houses where disinfection was carried out after death or removal	..	..	..	195

Handkerchiefs and Spitting Flasks.

To encourage patients to take precautions with infectious

sputum, spitting flasks are provided free of charge. During the year 142 flasks were given. Arrangements were made for supplying patients with Japanese paper handkerchiefs at a charge of sevenpence per hundred, the cost price ; the object of this is to encourage the patients to use the handkerchiefs in the manner explained to them at the Dispensary. Many patients availed themselves of the arrangements.

Educational Work.

The personal instructions of the health visitor regarding the prevention of the spread of Consumption are supplemented by the distribution of pamphlets and pictures. During the year 1913 the Dispensary published a simple pamphlet compiled by the Tuberculosis Officer, entitled "Advice to Consumptives and Others," and this is distributed widely among the patients.

Following up the successful course of lectures on the Prevention of Consumption held in November and December, 1913, the Tuberculosis Officer gave addresses dealing with the same subject and illustrated by lantern slides and diagrams to certain organisations, as follows :—

- Jan. 14th. Lamplighters' Literary Society.
- Jan. 22nd. Women's Co-operative Guild (North End Branch).
- Feb. 9th. Co-operative Guild (Central).
- March 17th. Shaftesbury Boys' Club.
- March 22nd. Tranmere Adult School.
- April 7th. Oxtou Road Adult School.

The importance of this branch of the work cannot be over-estimated, for the spread of Consumption is largely due to ignorance, and the dissemination of knowledge of the nature of the disease is a necessary part of the campaign against it.

Other Dispensary Work.

Examination of "Contacts."

In view of the fact that Tuberculosis can only be cured when discovered in a moderately early stage of its progress, efforts are made to detect early cases of Tuberculosis occurring in those who have lived in close contact with notified cases of Consumption and who have thus run the risk of infection. During the year 274 such persons, suffering from suspicious ill-health, were medically examined either in their own homes or at the Dispensary, and among them 13 cases of Tuberculosis were found (Pulmonary 11, Non-Pulmonary 2). Incidentally it may be mentioned that in the course of these investigations other unsuspected illnesses and defects were found, and the patients were referred to the appropriate places for treatment.

Co-operation with Medical Practitioners.

The Dispensary co-operates with the Practitioners of the Borough concerning diagnosis (including routine observations of doubtful cases as regards weight and temperature variations); also in securing continuity of treatment by acting as intermediary between the various Sanatoria and the practitioners.

Total number of consultations between Tuberculosis Officer and Practitioners for various purposes during 1914, 232.

Laboratory Work.

The Dispensary undertakes free of charge the microscopic examination of sputum and fluids suspected to contain Tubercle Bacilli, in order to assist Medical Practitioners in diagnosis. During the year 322 specimens have been examined, of which 184 were from patients attending the Dispensary, and 138 were sent by Medical Practitioners.

Treatment.

General treatment is not undertaken, the Dispensary treatment being limited to the application of special methods (e.g., Tuberculin) carried on by the Tuberculosis Officer in

co-operation with the medical practitioner providing the general treatment of the case. During the year 46 patients received injections of Tuberculin. Tuberculin is proving a useful aid in the treatment of Tuberculosis, and good results have been obtained in a considerable number of the cases where patients have attended regularly and constantly.

Total Number of Visits to Dispensary.

During the year 701 patients paid 3,351 visits to the Dispensary. Of these patients, 641 had not been to the Dispensary before; the remaining 60 had attended during the previous year.

Provision of Garden Shelters.

The open-air treatment of Consumption can be carried on at home where there is sufficient garden or back-yard to allow of the erection of a simple open-air sleeping shelter. Unfortunately in large towns very few of the houses afford convenience for this. The Corporation has arranged to supply such shelters to suitable patients, at a small rent, and at the end of 1914 two shelters had been provided and were in constant use. In one of the cases the Birkenhead Insurance Committee paid the rent, the patient being an insured person.

The Corkhill Fund.

Under the will of the late Mr. John Lloyd Corkhill, of Oxton, a sum of money was provided for the assistance of persons suffering from Consumption. An arrangement has been made by which the Trustees, while retaining in every respect their position as a private body make use of the facilities provided by the Dispensary for carrying on work among tuberculous patients. Persons applying for help from the Corkhill Charity are passed through the Dispensary for classification, and the Trustees are largely guided by the Tuberculosis Officer's recommendations. This charity is doing a very excellent work in the Borough. Applications for assistance may be made to Mr. J. Carlisle, c/o Mr. Edgar Hosking, 34, Castle Street, Liverpool.

LEASOWE SANATORIUM FOR SURGICAL TUBERCULOSIS IN CHILDREN.

Many of the bodily deformities which lessen the earning power of men and women, and consequently produce poverty, result from neglected illness in childhood. One of the greatest factors in the production of deformed cripples is the so-called "surgical tuberculosis" of childhood, that is to say, tuberculosis, not of the lungs, but of the bones and joints. Tuberculosis of glands, too, may become a serious menace to life unless the child receives adequate attention.

Just as in Tuberculosis of the lungs, so also in these other forms of Tuberculosis open-air treatment affords the best chance of cure. In a large number of cases of Tuberculosis of bones and joints it is necessary to confine the little patient to bed for many months at a time, with the affected part rigidly fixed by means of carefully applied apparatus. The general hospitals cannot always give up their beds to patients requiring such long periods of treatment, when more acute and urgent cases are asking for admission. Home treatment is rarely successful since constant supervision throughout the day by skilled persons is necessary.

For these and other potent reasons it has become apparent to those who have closely studied the question that special open-air hospitals are needed, built and equipped for the one purpose and staffed by doctors and nurses of specialised training. The Leasowe Sanatorium, founded by the Liverpool Invalid Children's Association with the approval of the Local Government Board and the Board of Education, is an example of the type of Hospital required.

Early in 1914 the Birkenhead Corporation decided to arrange for Birkenhead children to be admitted to the Leasowe Sanatorium, and subsequently the Birkenhead Insurance Committee offered to co-operate in the matter. As a result 12 beds have been available since August 31st, 1914., and the cases admitted are classified below. Since " surgical Tuberculosis " is so amenable to cure, under proper conditions, it is believed that the arrangements made will have a far-reaching effect in decreasing the number of deaths or deformities from this cause.

The following table gives the localisation of the disease in the cases treated :—

Tuberculosis of Spine	3
„ „ Hip	3
„ „ Knee.....	2
„ „ Elbow.....	2
„ „ Metatarsal	1
„ „ Tibia.....	1
„ „ Femur	1
„ „ Malar	1
„ „ Glands	2
„ „ Skin (ulcer)	1
<hr/>	
Total	17
Discharged	5
<hr/>	

December 31st, 1914, the number remaining in ..12

The five cases discharged were as follows :—One case of Hip disease removed by mother against doctor's advice, after one week ; one case of Hip disease which developed general Tuberculosis ; one of Elbow disease, cured ; one of glands, cured ; one of skin ulcer, cured.

National Health Insurance.

The Tuberculosis Officer is the Medical Adviser to the Birkenhead Health Insurance Committee, and Sanatorium Benefit is administered through the Dispensary.

Notifications and National Health Insurance.

The 417 notified cases (all forms of Tuberculosis) are classified as regards National Health Insurance as follows :—

	Pulmonary.	Non-Pulmonary.	Total.
Insured men	104	9	113
Insured women	33	4	37
Dependents	106	76	182
Non-insured class	48	19	67
Not traceable	18	—	18
Total	309	108	417

Insured Persons and the Dispensary.

Statistics were kept throughout the year of the position as regards National Health Insurance of all patients attending the Dispensary for all purposes. The 641 persons who paid their first visits to the Dispensary during the year were classified as follows :—

Insured persons	191
Dependents	420
Non-insured class	30
	<hr/> 641 <hr/>

Treatment provided by the Insurance Committee.

The following statistics refer to the work of the Birkenhead Insurance Committee which was transacted through the Dispensary, and refer to the period January 1st to December 31st, 1914, inclusive,

APPLICANTS FOR SANATORIUM BENEFIT.

	No. of Applicants.	Rejected on other grounds than health.	Examined	Recommended for treatment	Received treatment	
					Pulmonary	Non-Pulmonary
Men ..	66	1	65	64	64	—
Women	20	—	20	20	20	—
Total ..	86	1	85	84	84	—

TREATMENT GIVEN.

	Men.	Women	Total
Sanatorium ..	31	19	50
Hospital ..	—	1	1
Dispensary ..	13	4	17
Domiciliary ..	103	30	133

N.B.—This table refers to cases remaining under treatment on December 31st, 1913, as well as those whose first application were received during 1914. Many of the cases received more than one kind of treatment, and appear under different headings in the table. Refer also to the section on the work of the Dispensary, under the heading of "Treatment." Domiciliary treatment was supplemented by the provision of extra nourishment in necessitous cases.

Results of Treatment.

The following figures must be construed with great care and hasty conclusions avoided. It must be distinctly borne in mind that they cannot be used to compare the value of one kind of treatment with another, because they refer to entirely different classes of cases, and different degrees of disease :—

	Sanatorium		Hospital		Dispensary	
	Men	Women	Men	Women	Men	Women
Discharged (including those transferred from one form of treatment to another :—						
(a) fit for work	17	9	..	..	4	1
(b) improved	5	6	..	..	1	..
(c) without improvement	3	1	..	1	1	..
(d) worse .. .. .	..	1	..	..	..	..
Discontinued for other than medical reasons .. .. .	..	..	..	..	4	..
Died .. .. .	..	..	..	..	1	..
Total Cases in which treatment concluded	25	17	..	1	11	1
Still under treatment	6	2	..	..	2	3
TOTAL TREATED	31	19	..	1	13	4

DOMICILIARY TREATMENT.

	Men	Women
Completed Domiciliary Treatment :—		
(a) Fit for work	7	4
(b) Recommended for other forms of treatment ..	6	2
Discontinued for other than medical reasons	10	5
Died	29	5
Total treatment concluded	52	16
Still under treatment	51	14
	103	30

County Borough of Birkenhead.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of notifications during the period from 4th January, 1914, to the end of the week ending 2nd January, 1915.

Age Periods	Number of Notifications on Form A .. 392												Number of Notifications on Form B .. 13				Number of Notifications on Form C .. 79		
	Primary Notifications												Primary Notification				Total notifications (i.e. including cases previously notified by other doctors).	Total notifications (i.e. including cases previously notified by other doctors).	
	65 and upwards												Under 5	5 to 10	10 to 15	Total			
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	TOTAL							
Pulmonary—Males	9	20	10	19	14	27	28	23	10	3	163	210	..	1	1	2	2	23	24
" Females	3	13	17	15	11	36	14	13	5	3	130	185	..	..	2	2	2	8	24
Non-Pulmonary—Males ..	6	16	16	3	4	2	1	3	..	..	51	61	..	5	1	6	9	..	..
" Females	4	14	13	5	1	2	3	2	4	..	48	54	..	2	1	3	4	..	..

BIRKENHEAD.—Tuberculosis of the Lung (including Phthisis) and other forms of Tuberculosis.

Year.	Population at Midsummer.	Number of Deaths.									
		Total.		Tuberculosis of the Lung. (including Phthisis.)				Other Forms of Tuberculosis.			
		Deaths	Death Rate	Males (all ages)	Rate per 1000	Females (all ages)	Rate per 1000	Males (all ages)	Rate per 1000	Females (all ages)	Rate per 1000
1905	118982	178	1.49	100	0.84	78	0.65	16	0.13	2	0.01
1906	120964	162	1.33	99	0.81	63	0.52	26	0.21	19	0.15
1907	122978	121	0.98	66	0.53	55	0.44	36	0.29	26	0.21
1908	125026	151	1.20	89	0.71	62	0.49	37	0.29	28	0.22
1909	127108	137	1.07	81	0.63	56	0.44	41	0.32	21	0.16
1910	129227	152	1.17	98	0.75	54	0.41	41	0.31	31	0.23
1911	131377	160	1.21	98	0.74	62	0.47	31	0.23	20	0.15
1912	133521	150	1.12	80	0.59	70	0.52	34	0.25	23	0.17
1913	135740	168	1.23	104	0.76	64	0.47	32	0.23	27	0.19
1914	137996	141*	1.02	75	0.54	66	0.47	23	0.16	23	0.16

* This includes transferable deaths from other places.

The average Phthisis Death Rate for the last 10 years is 1.18 per 1000, equal to 152 deaths per year.

SPITTING ON TRAMCARS AND FERRY BOATS.

On the 2nd of October, I addressed the following letter to the Chairman and Members of the Tramways Committee and of the Ferries Committee.

“ Gentlemen,

Under the Public Health (Tuberculosis) Regulations, 1912, it is the duty of the Medical Officer of Health or an Officer acting under his instructions (the Tuberculosis Officer) to ‘ take such steps as may be necessary for preventing the spread of infection and for removing conditions favourable to infection.’

“ In view of the fact that consumption is spread from one person to another by means of the sputum, it seems desirable that greater efforts should be made to stop spitting in public places, and the Tramways Committee and the Ferries Committee might materially help in this difficult problem by forbidding spitting on the tramcars and ferry boats, and if necessary, by prosecuting offenders.

“ I have made observations on this subject for some time, and I regret to say that the practice is prevalent in Birkenhead to a terrible extent. Dr. Banks, our Tuberculosis Officer, is personally prepared to testify to the very disgusting condition of the upper decks of the tramcars, especially at such times as the workmen are travelling to and from work. But with this we, as Public Health Officers, have nothing to do, except in its bearing upon the spread of disease. In this connection I may remind you of the work of Dr. Frank Clifford who, in samples of spit collected at random from the public places of Swansea, found Tubercle Bacilli in no less than 60% of the samples. The danger of the spread of consumption by this means is therefore a very real one.

“ The Corporation of this Borough are spending large sums of money in the treatment and prevention of consumption ; it seems of little use that the staff of the Tuberculosis

Dispensary should spend so much of their time trying to educate the public in cleanly habits, while the practice of spitting is allowed to go practically unchecked on the Tramways and Ferries. The notices exhibited are neglected ; a series of frequent and repeated prosecutions has been proved in other places to have a salutary effect.

“ In the course of the educational campaign last winter, we found among the better class of working men a very strong feeling—stronger than we had realised—against the great prevalence of this habit, and the suggestion was frequently made that the Authorities were not doing all they might do to protect the public from the dangers caused by careless and indifferent people.

“ I therefore strongly appeal to you and trust it will be found possible to take steps to deal effectively with this very objectionable habit.

“ I am, Gentlemen,

“ Your obedient servant,

(Signed) R. SYDNEY MARSDEN.

Medical Officer of Health.”

These suggestions were very favourably received by the two Committees, and notice given cautioning passengers of the danger. As regards the Ferries this appears to have been all that has been done ; but in the case of the Tramways, it has been found necessary to take more drastic methods, and the Committee took proceedings against 27 different persons for spitting on the cars, a fine of 2/6 and costs being imposed in each case. The costs amounted to 6/6 in the case of those living within the Borough and 7/6 for those living outside the Borough.

Inquests.—The number of inquests held during 1914 was 157, thus 7.2 per cent. of the sum of the deaths in the Borough formed the subject of official enquiries. There were no deaths due to overlaying during the year.

Deaths not Certified.—Not all the death causes which are classified represent diseases or symptoms observed and certified by medical men in attendance during the last illness, or verdicts following official investigation. A significant proportion of the death causes are entered in the register on the doubtful testimony of deceased persons' relatives or friends, or fellow lodgers. The registrars have, therefore, been required to mark in the returns furnished, every death not certified by a registered practitioner, or made the subject of a coroner's inquest. In 1914 out of the 2,153 deaths registered, 6 were marked "not certified," that is 0.27 per cent. The causes of the 6 deaths were entered in accordance with the statements of persons giving information to the registrars as follows :—

Senile Decay	2
Premature Birth	1
Inanition	2
Cerebral Hæmorrhage	1

though how such conclusions were arrived at does not appear. In my opinion such deaths ought not to be registered without a Coroner's certificate.

The proportion of uncertified deaths to the sum of the deaths was as already stated, 0.27 per cent. as compared with 0.19 per cent. in 1913.

Deaths classified according to Localities.—Tables I., II., III., and IV., in the appendix, havng been fully discussed, are followed by Table V., in which the deaths registered during 1914 are classified according to the localities in which they occurred. Opposite each street or place is the number of deaths from all causes and from zymotic diseases, registered as occurring in that street or place during the year. As it was felt that particulars of the number of deaths from all causes, from zymotic diseases and of infants in each ward, would prove interesting, and as the Street Register does not afford this information, the Table here subjoined has been drawn up.

1914	Estimated Population at Midsummer, 1914	Deaths from All Causes		Deaths from Zymotic Diseases		Death rate per annum.	Infantile Death- Rates per 1000 Living.	No. of Deaths under 1 year
		M.	F.	M.	F.			
Cleveland Ward	25033	215	184	22	20	15.9	4.5	114
Cloughton "	8445	40	52	1	4	10.8	1.5	13
Grange "	27724	234	206	26	32	15.8	4.3	121
Argyle "	15921	158	118	19	14	17.3	5.0	80
Oxton "	5050	19	28	1	1	9.3	0.1	1
Egerton "	18137	105	95	16	10	11.0	1.9	36
Clifton "	25229	134	121	12	21	10.1	2.2	56
Mersey "	8708	58	50	14	8	12.4	2.2	20
Bebington "	3749	14	17	2	2	8.2	0.8	3
Birkenhead Bor- ough including deaths in Union premises	137996	1153	1000	121	123	15.6	3.3	462

Illegitimacy.—Statistics relating to illegitimacy are important, not merely on account of the bearing which such a subject has upon the social life of the community, but also with a view ultimately of showing to some extent the influence which illegitimacy exerts upon the "chances of life" of infants, as it is well known that the death-rate of illegitimate children is considerably greater than that of those born in wedlock. I have thought it desirable, therefore, to continue these statistics in this report, as the subject is one of some interest.

The following table gives the total number of legitimate and illegitimate births, with the rates per 1,000 of births and per 1,000 living, and statistics relative to the deaths of such children under one year of age.

Illegitimate Births and Deaths, 1914.

Registrar's Sub-District	Esti- mated Popu- lation 1914	Births		Illegitimate Births		Total deaths of children under one year of age	Deaths of Illegitimate children under one year of age	Percentage of deaths of Illegimates to total deaths under one year of age.
		Legiti- mate	Illegiti- mate	to 1000 living	to 1000 births			
Birkenhead	68678	2114	87	1.2	41.1	315	21	6.6
Tranmere, Oxton, Cloughton, Bebington & Workhouse	69318	1546	45	0.6	29.0	147	14	9.5
Total	137996	*3660	132	0.9	36.0	462	35	7.5

* 20 births have since been transferred to other places. Hence the difference in total as given on unrevised number.

**HOUSING OF THE WORKING CLASSES ACTS,
1890 to 1909.**

During the twelve months ending 31st December, 1914, a large amount of work was carried out by the Department under the provisions of the Housing of the Working Classes Acts, 1890 to 1909, and the Regulations made by the Local Government Board dated 2nd September, 1910, the particulars of which are as follows, viz. :—

The number of dwelling-houses inspected for the purposes of Section 17 of the Act of 1909, and the Regulations made by the Local Government Board during 1914. 1668

The number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation 79

During the year no representations were actually made to the Committee, but several reports upon certain blocks of property were in course of preparation for its consideration, but were held over on account of the outbreak of the war ..

The number of dwelling-houses dealt with and made fit for human habitation under Sections 14 and 15 of the Act of 1909 115

The number of dwelling-houses inspected under Section 17 of the Act of 1909, and the Housing Regulations 1910, and the defects found therein remedied under the provisions of the Public Health Act, 1875, and the houses put into a proper and satisfactory condition 1213

The number of closing orders made.. 48

The number of dwelling-houses, the defects of which were remedied without the making of closing orders 24

In connection with this work it may be explained there are a number of houses, the subject of representations, now in course of being altered and made fit for habitation, under arrangement with the Health Committee, and in which the work was not completed at the end of the year ..

The number of dwelling-houses which, after the making of closing orders, were put into a fit state for human habitation 12

The number of demolition orders made 37

The number of houses demolished 9

22 "Back to Back" houses were converted into 11 single "through" houses

The general character of the defects found to exist were back to back or solid backed houses, no through ventilation, crowded and confined conditions, the want of, or insufficient yard space, water supply and sanitary conveniences, and general repairs.

I think the year's record must be considered a satisfactory one.

I am, Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
TOWN HALL, BIRKENHEAD,
10th April, 1915.

THE INFECTIOUS DISEASES HOSPITAL,
TOLLEMACHE ROAD.

Report for the year 1914.

HOSPITAL VISITING SUB-COMMITTEE.

MR. ALDERMAN E. G. MASON, J.P., *Chairman.*

MR. ALDERMAN THOMAS SHAW.

MR. ALDERMAN MICHAEL BYRNE.

MR. COUNCILLOR ROBERT FRAME.

MR. COUNCILLOR W. W. KELLY.

MEDICAL OFFICER AND PHYSICIAN.

DR. R. SYDNEY MARSDEN.

EXTRA PHYSICIAN.

DR. H. H. ROBINSON.

MATRON.

MISS EMILY YEOMANS.

There has been no addition to the number of beds in the hospital during the year. The Staff consists of the Matron, 17 nurses, 19 female servants, an engineer, 2 porters and 2 gardeners.

The total number of patients treated in the hospital during the year (January 1st to December 31st) was 424; of these 358 were admitted during the year, and 66 remained in hospital from 1913. Out of those admitted 15 died, giving a death-rate of 4.13 per cent., a low percentage.

The following table gives a summary of the cases treated in the hospital during the year 1914, along with the results obtained.

DISEASES	M.	F.	Re- covered		Died	
			M.	F.	M.	F.
Scarlet Fever—remaining ..	36	26	36	26	—	—
admitted ..	135	151	129	150	6	1
Typhoid—admitted.....	6	4	5	3	1	1
Diphtheria—remaining	—	4	—	4	—	—
admitted	28	32	26	23	2	4
Croup	1	1	1	1	—	—

The new small-pox hospital plans have already passed the Council, and it was expected that the building would be ready by the end of 1915; but owing to the outbreak of the war the work is not being proceeded with at present.

By special agreement with the Corporation of Wallasey, small-pox cases from this Borough are now sent to the Wallasey Small-pox Hospital.

A change has taken place at the Hospital in regard to the length of time for the detention of Scarlatina cases. Acting on the modern views held in regard to such cases, we have now for a very long time discharged all uncomplicated cases of Scarlatina at the end of the fourth week, whether they are peeling or not and with marked advantage as the number of return cases has been greatly reduced whilst the capacity of the Hospital for Scarlatina cases has been increased by one third. It was formerly the custom to isolate for a minimum of six weeks, or until such a time as peeling was completed. We now disregard peeling after the middle of the fourth week, so that we save two weeks' expenses on each case, and have thereby greatly reduced the cost of the Hospital, whilst a third more Scarlatinal patients can be treated with the same number of beds, a very important matter when the disease is epidemic.

THE E. P. SMITH MEMORIAL CONVALESCENT FUND.

FOR PATIENTS WHO HAVE BEEN TREATED IN THE FEVER
HOSPITAL.

Particulars relating to this Fund were given in my Report for 1903.

There were three suitable cases to receive benefit by the Fund during the year 1914, viz. :—

May, A. H.

August, P. M.

October, J. R.

APPENDIX.

- 1.—Vital Statistics of Whole District during 1914 and previous years.
- 2.—Table showing Death Rates each week during 1914.
- 3.—Causes of and Ages at Death during 1914.
- 4.—Cases of Infectious Diseases notified during 1914.
- 5.—Infantile Mortality during the year 1914.

TABLE I.—Deaths Registered in the County Borough of Birkenhead during the year ending December 31st, 1914, classified according to age.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1914.

TABLE III.—Weekly Condensed Register of Deaths for 1914.

TABLE IV.—Weekly Condensed Register of Meteorological Results for 1914.

TABLE V.—Street Register of Deaths—1914.

SUPPLEMENT TO TABLE V.—Return of Deaths in Birkenhead Union Hospital and Workhouse, registered in 1914.

Vital Statistics of Whole District during 1914 and previous Years.

Year.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT.		
		Un-corrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents registered in the District.	Under 1 year of age		At all ages.
			Number.	Rate.					Number.	Rate per 1,000 Net Births.	
1909	127108	3737	..	29.4	1946	15.3	16	35	458	122	1965
1910	129227	3730	..	28.8	1980	15.3	17	30	507	135	1993
1911	131377	3748	3732	28.4	2054	15.6	29	82	509	136	2107
1912	133521	3793	3774	28.2	1920	14.3	36	80	371	98	1964
1913	135740	3931	3907	28.7	1972	14.5	46	106	458	117	2032
1914	137996	3790	3772	27.3	2112	15.3	85	126	462	122	2153

Total Population at all ages ..	130,794	} At Census, 1911.
Number of inhabited houses ..	24,343	
Average number of persons per house..	5.3	
Area of District in acres (exclusive of area covered by water)	3,850	
Total families or separate occupiers ..	26,887	

**Table shewing Death Rates each week during
year 1914.**

(Unrevised as to transferable deaths from other districts).

Week Ending 1914.	No. of Deaths.	Death Rate per 1,000.	Week Ending 1914.	No. of Deaths.	Death Rate per 1,000.
January 7	40	15.0	July 8	34	12.8
14	44	16.5	15	40	15.0
21	40	15.0	22	34	12.8
28	37	13.9	29	36	13.5
February 4	42	15.8	August 5	45	16.9
11	42	15.8	12	33	12.4
18	39	14.6	19	37	13.9
25	44	16.5	26	22	8.2
March 4	37	13.9	September 2	31	11.6
11	27	10.1	9	31	11.6
18	29	10.9	16	28	10.5
25	38	14.3	23	47	17.7
April 1	46	17.3	30	43	16.2
8	43	16.2	October 7	59	22.2
15	40	15.0	14	40	15.0
22	38	14.3	21	54	20.3
29	35	13.1	28	52	19.5
May 6	34	12.8	November 4	34	12.8
13	26	9.7	11	42	15.8
20	38	14.3	18	49	18.4
27	29	10.9	25	57	21.4
June 3	27	10.1	December 2	44	16.5
10	25	9.4	9	44	16.5
17	25	9.4	16	61	22.9
24	31	11.6	23	42	15.8
July 1	36	13.5	(8 days) 31	61	22.9

Causes of, and Ages at Death during Year 1914.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF RESIDENTS, WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									DEATHS IN OR BELONGING TO LOCALITIES AT ALL AGES.							TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT
	All ages	under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Whole Borough	Birkenhead	Transmere	Cloughton	Oxtou	Bebington	Workhouse	
All causes { Certified .. { Uncertified ..	2147	459	188	142	90	88	278	456	446	2147	1111	562	92	46	31	305	196
Chicken-pox ..	6	3	1	..	..	..	..	..	3	6	4	1	..	1	..	5	..
Enteric Fever ..	5	4	..	..	..	..	3	1	..	5	2	1	1	..	..	..	2
Small-pox ..	4	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Measles ..	67	12	28	24	2	..	1	..	..	67	43	18	1	..	..	5	..
Scarlet Fever ..	6	..	..	5	1	..	..	..	..	6	4	2	..	..	..	..	6
Whooping-cough ..	49	16	17	14	2	..	..	..	..	49	23	21	1	1	..	4	..
Diphtheria and Membranous Croup ..	16	1	5	6	4	..	..	..	..	16	12	2	2	1	..	..	6
Influenza ..	21	1	1	..	1	1	3	7	8	21	7	10	2	1	2	..	..
Erysipelas ..	5	3	..	1	..	..	..	1	..	5	1	4	..	..	..	..	..
Cerebro-Spinal Fever ..	1	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	1
Other Zymotic Diseases ..	20	7	1	1	..	3	1	6	1	20	10	5	..	..	1	4	2
Phthisis (Pulmonary Tuberculosis) ..	141	..	1	4	12	27	60	32	5	141	53	38	3	1	1	45	6
Tuberculous Meningitis ..	24	4	5	5	9	..	1	..	..	24	10	9	1	..	..	4	5
Other tuberculous diseases ..	22	6	4	3	3	4	1	1	..	22	12	5	1	..	..	4	1
Rheumatic Fever, Rheumatism ..	46	..	..	..	3	1	1	..	1	6	3	2	..	..	..	1	..
Cancer, malignant disease ..	114	..	..	1	..	1	13	59	40	114	36	39	7	2	8	22	6
Bronchitis ..	157	26	6	4	3	1	4	47	66	157	84	25	9	..	1	38	3
Broncho-Pneumonia ..	115	41	40	12	2	1	5	6	8	115	76	25	1	3	1	10	5
Pneumonia (all other forms) ..	203	23	29	21	10	11	50	39	20	203	138	36	5	7	2	17	21
Other diseases of Respiratory organs ..	37	3	2	5	2	3	8	13	4	37	13	14	5	1	2	2	6
Diarrhoea and Enteritis ..	136	94	21	7	2	3	2	4	3	136	105	23	4	1	1	2	12
Appendicitis and Typhlitis ..	10	..	..	1	3	2	1	3	..	10	6	2	1	..	1	1	6
Alcoholism ..	5	..	..	..	..	..	3	2	..	5	2	3	..	2	..	..	1
Cirrhosis of Liver ..	12	..	..	..	..	..	2	6	4	12	6	3	..	2	1	3	4
Nephritis and Bright's Disease ..	52	..	2	2	2	1	13	24	8	52	29	16	3	..	1	1	..
Puerperal Fever ..	2	..	..	..	..	..	2	..	..	2	..	1	..	..	..	1	..
Other accidents and diseases of Pregnancy and Parturition ..	7	..	..	..	..	1	6	..	..	7	3	3	..	..	..	1	1
Congenital Debility & Malformation, including Premature Birth ..	183	174	8	1	..	..	..	..	..	183	118	50	5	1	1	8	16
Violent Deaths, excluding Suicide ..	78	13	3	4	5	6	22	17	8	78	55	17	1	1	1	4	21
Suicides ..	6	..	..	..	..	..	2	3	1	6	3	3	1	..	..	..	4
Brain Disease ..	107	5	5	7	3	6	11	38	32	107	49	25	8	2	4	19	13
Heart Disease ..	173	1	1	..	8	10	30	78	45	173	59	49	8	12	1	44	7
Other Diseases ..	369	29	8	13	13	9	33	69	195	369	153	113	24	12	6	61	41
	2153	462	188	142	90	88	278	456	449	2153	1115	563	92	47	31	305	196

Infantile Mortality during the year 1914.

CAUSE OF DEATH.		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month	1-3 mos.	3-6 mos.	6-9 mos.	9-12 mos.	Total Deaths under 1 year
All Causes :—											
Certified	..	80	18	13	26	137	88	72	75	87	459
Uncertified	..	3	..	..	..	3	..	..	..	..	3
Small-pox		..	..	..	..	..	..	..	..	..	..
Chicken-pox		..	..	..	..	..	..	..	..	..	..
Measles		..	..	..	..	..	..	..	..	..	..
Scarlet Fever		..	..	..	..	..	..	..	..	..	..
Whooping Cough		..	..	..	..	..	..	..	..	..	..
Diphtheria and membranous croup		..	..	..	..	..	..	..	..	..	..
Erysipelas		..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis		..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis		..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases		..	..	..	..	..	..	..	..	..	..
Meningitis (not tuberculous)		..	..	..	..	..	..	..	..	..	..
Convulsions		1	1	1	2	5	6	..	..	..	..
Laryngitis and Croup		..	..	..	..	..	..	..	..	..	..
Bronchitis		..	1	2	2	5	9	4	5	3	26
Pneumonia (all forms)		..	1	1	1	3	10	7	21	24	64
Diarrhoea		..	..	..	..	..	6	10	13	7	36
Enteritis		..	3	..	2	6	14	19	10	9	58
Gastritis		2	1	..	..	3	5	..	1	..	3
Syphilis		..	..	..	..	1	..	..	..	..	..
Rickets		..	..	..	..	..	..	..	..	..	..
Suffocation, overlying		5	..	..	..	5	3	2	..	1	10
Injury at Birth		..	..	..	..	..	..	..	..	..	..
Atelectasis		2	..	..	..	2	..	..	..	..	..
Congenital Malformations		7	3	..	1	11	3	3	..	..	17
Premature Birth		45	3	7	8	64	3	..	..	..	67
Atrophy, Debility, Marasmus		19	4	3	10	36	23	18	8	6	90
Other Causes		1	1	..	..	2	2	5	2	6	17
Total		83	18	13	26	140	88	72	75	87	462
Nett Births in the year		{ legitimate 3646 illegitimate 126		Nett Deaths in the year of {		{ legitimate infants 427 illegitimate infants 35					

I.—Deaths Registered in the Borough of Birkenhead during the Year ending December 31st, 194.

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TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1914.

[illegible]

NOTE.—The weeks end January 7th, 14th, &c., the last week in the year includes one day extra.

Deaths in the County Borough of Birkenhead for the year ending December 31st, 1914.

[illegible]

NOTE.--The weeks end January 7th, 14th, 21st, &c., the last week in the year includes one day extra.

County of Birkenhead for the year ending Decce.abe: 31st, 1914.

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year includes one day extra.

TABLE IV.—Weekly Condensed Register of Meteorological Results for 1914.

Meteorological Results.	YEAR.	WEEKS.												4TH Qr.
		WEEKS.												
		1	2	3	4	5	6	7	8	9	10	11	12	
Percentage of time Wind blew from S., S.W., W., and N.W.	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Mean Hourly Horizontal Motion of the Air in Miles	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Average Percentage of Cloud to Clear Sky	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Rainfall in Inches	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Rainfall as to Hours	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Thermometer Means	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Mean of Evaporation	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
Barometer Means reduced to Sea Level and to 32° Fahr.	29.907	29.830	29.823	29.842	29.834	29.842	29.779	29.427	29.438	29.408	29.606	29.505	29.52	
	47.53	45.13	35.11	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	
	47.53	46.62	36.60	40.97	42.67	42.67	39.05	37.18	38.05	40.88	43.60	43.47	46.47	

The Meteorological Results are for the 52 weeks ending December 26th 1914.
Mean reading of the Barometer for 45 years reduced to Sea level, and to 32° Fahrenheit = 29.923 in.

TABLE V.
STREET REGISTER OF DEATHS.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Abbey Street	4		Atherton Street		
Abbey Terrace			Athol Street		
Abbot Street	4	2	Athol Terrace	1	
Aberdeen Street	2		Austin Street	5	
Ackworth Place	1	1	Back Arthur Street		
Acton Road			Back Beckwith Terrace ..		
Adelaide Road	3		Back Camden Street	1	
Adelphi Street	3		Back George Street		
Albany Road	1		Back Havelock Street	1	
Albert Place	2	1	Back Livingstone Street ..		
Albert Road	1		Back Myrtle Street		
Albert Street			Back Oliver Street		
Albert Terrace			Back Price Street		
Albion Street	6		Back St. Anne Street	9	
Alcott Avenue	4		Balfour Road	2	
Alderley Avenue	2		Balls Road		
Alexandra Drive	1		Balls Road East	8	
Alexandra Road			Bankville Road	2	
Alfred Road	3		Banning Street	3	
Alison Street	1	1	Barnard Road		
Allerton Grove	1		Barnston Street	3	
Allerton Road			Barton Street	2	
Alma Street	2		Baytree Road	2	
Alpha Drive	1		Beaconsfield Road		
Alton Road			Beaufort Road		
Alvanley Place	3		Bebington Road	3	
Alverstone Avenue	2	1	Beckwith Street	33	
Amery Grove			Bedford Place	3	
Anglesea Terrace			Bedford Road	6	
Apple Grove	1	1	Bedford Street	2	
Argyle Street	2		Beech Road	3	
Argyle Street South	4	1	Beech View		
Arno Road			Belgrave Terrace		
Arnside Road	1		Belmont	1	
Arrowe Place			Belmont Grove	1	
Arthur Street	8	1	Bennett's Hill		
Ash Road			Bentinck Place	1	
Ashburton Road	1		Bentinck Street	9	
Ashford Road			Bentinck Terrace	2	
Ashley Street			Bentley Road	1	
Ashville Road	2		Beresford Road	3	
Aspendale Road	2		Berner Street		
Aspinall Street	1		Berry Street	5	
Asquith Avenue	1		Bertha Street	4	
Astonwood Road	2		Bessborough Road		

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Bidston Avenue	2		Carnforth Street	2	
Bidston Road	2		Carnforth Terrace	1	1
Birch Road			Caroline Place	1	
Birkenhead Park			Carrington Street	3	
Blackpool Street	1		Castle Street		
Blandford Street			Cathcart Street	15	1
Blucher Street	2	1	Catherine Street	3	
Bold Street			Cavendish Drive		
Booth Street	3	2	Cavendish Road		
Borough Road	26	6	Cavendish Street	4	
Boundary Road			Cearns Road	3	
Braid Street	2	1	Cedar Street		
Brancote Road			Challis Street	1	
Brandon Cottages			Chamberlain Street		
Brandon Street	1		Chapel Place (B'head) ..	2	2
Brassey Street	5		Chapel Place (Tran.) ..		
Brattan Road	3		Chapel Square		
Bray Street	2		Chapel Street	4	2
Briardale Road	2		Charlecombe Street		
Bridge Street	12		Charles Street		
Bridge End Terrace	2		Charlesville	3	
Bright Street			Charing Cross		
Brill Street			Chatham Road	5	
Brimstage Street			Chatsworth Road		
Brook Place	6		Chesnut Grove	1	
Brook Square	1		Chester Street	8	1
Brook Street	47	5	Chetwynd Road		
Brookland Road			Christchurch Road	2	
Broom Hill	1		Church Place		
Brougham Street	9		Church Road	6	
Browning Avenue	4		Church Street	15	
Brunswick Street	8	2	Church Terrace	3	
Buckingham Avenue	1		Churchill Avenue	2	
Budworth Road			Circular Road	2	1
Bulwer Street			Clare Street		
Burton Street	3		Clarence Road	1	
Buxton Road	1		Clarendon Street	1	1
Caerwys Grove	1		Claughton Firs	2	
Caldy Place	1		Claughton Place		
Cambridge Place	3		Claughton Road	15	2
Camden Street	6		Clayton Street	1	
Campbell Terrace	4	1	Cleveland Avenue	2	
Camperdown Street			Cleveland Street	26	3
Canning Street	2		Clifford Street	3	
Cannon Hill			Clifton Crescent	1	
Canterbury Road			Clifton Road	3	
Cardigan Street	1		Clive Road		
Carlisle Street	4	2	Club Row		
Carlton Mount			Clwyd Street	1	
Carlton Road	1		Clyde Street		

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Cobden Place			Dundonald Street	1	
Cobden Street	5	1	Eagle Court.....	1	
Coburg Street			Earl Street	3	
Cole Street			East Bank		
Collingwood Street	4	1	Eastbourne Road		
Columbia Road			Eastham Street	1	
Colwyn Street	2		Eaton Road.....	1	
Combermere Terrace			Ebenezer Street	3	
Comet Street	4	1	Edgar Street.....	1	
Connaught Street	1		Egerton Park	1	
Conway Place			Egerton Road		
Conway Street	11	3	Egerton Street.....	3	
Cook Street			Elderwood Road.....		
Corinthian Street.....	1		Eldon Place	10	
Corfu Street.....			Eldon Road.....		
Corporation Road	6		Eldon Street.....	6	
Cottage Street.....	3	1	Elfet Street		
Coventry Street	1		Elgin Street.....	1	
Cranbourne Avenue	3		Elizabeth Place	2	
Craven Place	1		Elm Grove	1	
Craven Street	7	1	Elm Road.....		
Cressington Avenue			Elm Street		
Crofton Road	1	1	Elmswood Road	7	3
Cromwell Street			Enfield Terrace	1	
Cross Street	1		Erskine Street.....	2	1
Crown Street	1		Esplanade.....		
Croxtheth Street	2	2	Etna Street		
Cumberland Place	1		Euston Grove	2	
Curzon Avenue			Exmouth Street	12	3
Cyprus Street			Falcon Road		
Dacre Street.....	5	1	Fairclough Lane	1	
Daffodil Road.....	5	1	Fairfax Road	2	
Dale Street			Fairfield Road.....		
Davies Street	4	3	Fairview Road.....	1	
Dee Street.....			Falkland Street	3	1
Dell Road.....			Farm Road	2	
Derby Road.....	2		Fearnley Road.....		
Derby Street	2		Field Street	8	3
Derwent Road.....			Flamank Street	11	3
Devonshire Place.....			Flaybrick Hill		
Devonshire Road			Flint Street	2	1
Dial Road.....			Florence Street		
Dingle Road.....	1		Fore Street	4	
Donegal Street.....			Forest Road.....	2	1
Doric Street.....			Fountain Street	5	1
Douglas Street.....			Fox Street	10	4
Dover Street.....	4		Francis Avenue	3	
Downham Road	2		Frederick Street	5	
Duke Street.....	9	1	Freeman Street		
Duncan Street.....			Frodsham Street.....	6	1

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Garfield Place			Harland Road	2	
Garner's Place			Harper's Court		
Garnet Street	4	1	Hartington Avenue	1	
George Street	7		Harriet Street	1	
Gerald Road			Harrowby Road	6	
German Terrace	1		Harrowby Road South ..		
Gertrude Street			Hatherley Street		
Getley Street	1	1	Havelock Street	3	
Gladstone Road	2		Hawarden Avenue		
Gladstone Street	10	1	Hawthorne Road		
Glasgow Street			Haymarket	1	
Glenmore Road	1		Hazel Road		
Glover Street	2		Heathbank Road	1	
Gomer Street			Heather Brow	2	
Gordon Street	1		Heathfield Road	3	
Gore Street	1	1	Helmingham Road	5	2
Gorsefield Road	4		Hemingford Street	1	
Gothic Street			Hemingford Terrace		
Grace Street	2		Henry Street	10	1
Grace Terrace			Henthorne Street	2	
Grafton Street			Herbert Place	1	
Grange Mount	4	1	Highfield Crescent		
Grange Place			Highfield Grove	1	
Grange Road	4		Highfield Road	1	
Grange Road West	4		Highfield South		
Grasville Road	1		Highgreen Road	1	
Green Lane	1		Hilbre Street	2	
Green Lawn	3	1	Hillside Road		
Greenbank Road	2		Hill Road		
Greenfield Street	3	1	Hilton Street	6	
Greenway Road	4		Hind Street		
Grenville Road	3		Hinderton Road	1	
Grosvenor Place			Hinson Street	2	
Grosvenor Road	1		Holborn Hill	3	1
Grosvenor Street	8	1	Holborn Square	1	
Grosvenor Terrace			Holly Bank Road		
Grove Mount			Holm Lane	1	
Grove Road	3		Holt Hill	2	
Haddon Road	1		Holt Hill Terrace		
Halcyon Road	2		Holt Road	3	
Haldane Avenue	2		Holt Terrace		
Halkin Street			Hope Street	3	1
Hamilton Lane	1		Hope Terrace		
Hamilton Square	1		Horatio Street		
Hamilton Street	1		Hornby Street		
Hamilton View			Houldin's Place		
Hampden Grove			Howard Street	2	
Hampden Road	1		Howbeck Road		
Hampton Street	3		Howe Street	1	1
Harcourt Street	1		Howson Street	1	

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Hoylake Road.....	1		Lilly Street	3	1
Hughes' Buildings			Lingdale Road.....	2	
Hughes' Lane	1		Lingdale Road North....		
Huskisson Street.....	1		Linwood Road.....	1	
Ionic Street.....	1		Liversidge Road	3	
Inglemere Road	3		Livingstone Road	2	
Ingestre Road.....			Livingstone Street	11	1
Ivy Bank			Lloyd Avenue		
Ivy Court.....			Lord Street	4	
Ivy Street.....	5		Lorn Street		
Ivydale Road	1		Lorne Road	1	
Jackson Street.....	1		Lowe Street.....	1	
James Street			Lower Ivy Street.....		
Jessamine Road	2		Lower George Street		
John Street	2		Lowther Street.....	10	
Keightley Street	4	1	Lowwood Grove	2	
Kellett's Place.....	1		Lowwood Road	2	1
Kelvin Road			Lunar Street	3	2
Kendal Street	1		Lydia Terrace		
Kent Place	5	1	Lynas Street.....	2	1
Kent Street			Maddock Street		
Kimberley Street.....	1		Mallaby Street.....		
King Street	1		Malta Street.....		
King's Mount			Manor Hill		
Kingsdown Street	1		Maple Street.....	2	
Kingsland Road	2		Marcus Street		
Kingsley Street	1		Marion Grove		
Kingsmead Road North..			Marion Street	2	
Kingsmead Road South..	1		Market		
Kinmel Street	2	1	Market Place South.....		
Kipling Avenue	1		Market Street	14	3
Kirkland Avenue			Marlborough Grove.....	1	
Knowles Street			Marquis Street.....		
Knowsley Road	1		Marsden Villas		
Knox Street.....			Marshall Place		
Kylemore Road			Marshall Street		
Laburnam Road.....			Mason's Court.....		
Laird Street.....	12	2	Mason Street	3	1
Lansdowne Road.....	7		Massey Street	3	1
Larch Road	3		Mather Road		
Laurel Road.....			Maybank Road	6	1
Lacey Terrace.....			Meadow Lane	4	1
Lea Street.....	2		Meadow Place	1	
Lees Avenue	1		Meadow Street.....		
Leicester Street	8		Medway Road.....	2	
Leicester Terrace.....			Mellor Road.....	1	
Leighton Road.....	2		Menai Street.....	5	1
Leinster Street.....	2		Mere Farm Road.....	3	
Leta Street	1		Mersey Lane South.....		
Lever Terrace			Mersey Mount		

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Mersey Road	3	1	North Road	2	
Merton Place	2		Oak Bank		
Meteor Street	4	3	Oak Street	4	1
Methuen Street	1		Oakdene Road	2	1
Midland Street	2		Oakfield View	9	
Mill Street	3		Oak Tree Cottages	2	
Millar's Place	2		Oak Tree Place	2	
Millbank Cottages			Oak Tree Terrace	1	
Milner Street	1		Old Bidston Road	11	2
Milton Road	2		Old Chester Road	19	2
Milton Street	1		Old Priory	3	
Miriam Place			Olive Crescent	1	
Mollington Street			Olive Mount	1	
Mona Street	1		Oliver Lane		
Monk Street	3		Oliver Place	5	
Monk's Ferry			Oliver Street	24	1
Moon Street	4	1	Orchard Road	1	
Moorland Road	3	1	Oriel Road	3	1
Moreton Street	1		Osborne Road		
Morecroft Road	1		Osmond Street	3	
Morley Avenue	1		Oxton Road	1	
Mornington Street	5		Palm Grove	1	
Morpeth Buildings	12	1	Palm Hill		
Mortimer Street	2		Palmerston Street	1	1
Mossley Road	1		Parkbridge Road		
Moss Grove			Parkend Road		
Moss Lane			Parkhill Road		
Mounsey Road			Parkfield Avenue	1	
Mount Grove	4		Parkfield Place	3	
Mount Pleasant			Parkside Road	2	
Mount Road	5	1	Parkstone Road	2	
Mount Street	1		Park Grove		
Mulberry Road	3		Park Road	2	
Munster Street	2		Park Road East	4	
Myrtle Court	3		Park Road North	9	
Myrtle Place			Park Road South	1	
Myrtle Street			Park Road West	1	
Napier Street	1		Park Street	12	1
Nelson Place	1		Parkton Grove		
Nelson Road	3	1	Parr's Road	1	
Nelson Street	5		Paterson Street	3	
Neptune Street	3	1	Patten Street	5	1
Neston Street	4		Payson Street	4	
Newburn's Lane	2		Pearson Road	1	
New Chester Road	11	4	Peel Street	15	2
New Ferry Pier			Pensby Street		
Newling Street	2		Penrith Street	1	
Newton Street			Percy Place		
Norman Street	2		Pilgrim Street	2	
Normanston Road			Pitt Street	6	

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Planet Street	1	1	Ripon Street	1	
Pleasant Street	3		Roberts Street	4	1
Plumer Street	2		Rochester Road	2	
Plymouth Place			Rock Ferry Pier		
Pool Street	1	1	Rock Lane East	3	
Poplar Grove			Rock Lane West	4	1
Poplar Road	2		Rock Park	5	1
Portland Street	1		Rockville Street	3	
Powell Street	4		Rocky Bank Road	1	
Prenton Park Road	1		Rodney Street	12	
Prenton Road East	1		Roe Street		
Prenton Road West	3		Romilly Street		
Price's Lane	2	1	Rose Brae		
Primrose Road	1		Rose Cottages	1	
Price Street	27	2	Rose Mount	3	1
Prince Edward Street	2		Rose Place		
Princes' Place	2	1	Rose Street	2	
Princes' Street	1		Rosebery Grove	2	
Princess Ter. (Balls Road)			Rosedale Road	4	
Princes' Terr. (Grange Rd)			Roslin Road		
Priory Court	4		Roslyn Street	4	1
Priory Street			Ross Terrace		
Prospect Place			Rowland Street	3	1
Pym Street	1		Roxburgh Avenue	3	1
Quarry Bank	1		Rundle Street	1	
Quarry Bank Place	3		Rushton's Court		
Quarry Bank Street			Ruskin Avenue		
Queen's Buildings (A to K)	22		Russell Cottages		
Queen's Buildings, (Tran.)	7	4	Russell Place	1	
Queen's Place	3		Russell Road	8	
Queen's Road			Russell Street	2	
Queen Street	5	2	St. Andrew's Road		
Queensbury Street	4		St. Anne's Grove		
Quigley Street			St. Anne Street	31	5
Radnor Place	1		St. Anne's Terrace		
Raffles Road	6	2	St. George's Avenue	1	
Railway Road	2		St. John Street		
Randle Street	3		St. Mary Street		
Rathmore Road			St. Mary's Avenue	3	
Ravenscroft Road	1		St. Mary's Gate	2	
Ravenswood Avenue			St. Paul's Place		
Rawcliffe Road			St. Paul's Road	7	3
Redmond Street			St. Paul's Villas		
Reedville	1		St. Peter's Road		
Rhoden's Place			Salem View		
Rhyl Street	2		Salisbury Street	4	
Richmond Cottages	1	1	Samuel Street	2	
Richmond Terrace			Sandford Street	2	
Ridley Street	1		Saxon Street		
Rimmer's Court			School Place	4	2

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Scott's Court			Sussex Street	2	
Scott's Place			Swan's Court		
Seabank Cottages	2		Swan's Place		
Seabank Road			Sycamore Road		
Seaton Road			Talbot Road	1	
Seeley Avenue			Tatton Road		
Sefton Road			Taylor Street	2	
Seymour Street	2		Temple Road	1	
Shakespeare Avenue	1		Templemore Road		
Shaw Street	3	1	Tennyson Avenue	2	
Shaw's Place	1		Tetbury Street	1	
Shaw's Terrace			Thomas Street	9	4
Shore Road			Thomas Court	1	
Shotwick Street			Thompson Street	2	
Shrewsbury Road	6		Thornton Street	2	
Shrewsbury Road North..			Tollemache Road		
Sidney Buildings	3		Tower Hill	1	
Sidney Road	1		Tower Road	2	
Sidney Street			Town Road	2	
Sidney Terrace			Trinity Street	2	
Silverdale Road	1		Tudor Road	3	
Simpson Street	2		Tunnel Road	2	
Singleton Avenue	4		Turner Street	1	
Slutey Road	3		Tuscan Street		
Somerville Street			Tyrer Street	1	
South Bank			Thorneycroft Street	2	1
South Hill Grove			Union Street	3	
South Hill Road			Upper Beckwith Street ..	1	
South Reserve			Upper Brassey Street	3	
South Road	2		Upton Road	3	
Southdale Road			Vardon Street		
Southwick Road	3		Vernon Place	2	
Spencer Avenue	1		Vicar's Court		
Spring Street	1		Victoria Drive		
Spring Villas			Victoria Mount		
Stafford Street			Victoria Road	3	
Standard Place			Village Road	1	
Stanley Court	2		Village Terrace		
Stanley Place			Vincent Street		
Stanley Road	2		Vine Street	8	1
Stanley Street	3	1	Violet Road		
Stanway Place			Vittoria Street	10	2
Star Street	1		Vittoria Dock and Wharf.		
Station Road			Vulcan Street	6	2
Stewart Place			Walker Place	3	1
Stewart Street			Walker Street	4	
Stoke Street	2		Walton Street	3	1
Storeton Road			Waring Avenue	1	
Stuart Road	3		Warrington Street	2	
Sun Street	5		Warwick Street	3	1

TABLE V.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Water Street			Williams' Cottages	1	
Waterford Road			Willmer Road	10	1
Waterloo Place	4		Willowbank Road	1	
Watson Street	2		Willow Street	1	
Waverley Grove			Willy Street	3	
Well Lane			Wilson Street	2	
Wellesley Street			Wilton Road	1	
Wellington Road	5		Wilton Street	1	
Wellington Terrace	1		Windsor Place		
Wesley Street	1		Windsor Street		
Wesley Terrace			Wirral Street		
West View	2	1	Woburn Place	1	
West Bank Road	1		Wood Street	9	3
Westbourne Road	9	2	Woodchurch Lane	3	1
Westbury Street	1		Woodchurch Road	10	
Westminster Road	3		Woodsorrel Road	3	
Wexford Road			Woodland Avenue	1	
Whalley Road			Woodland Grove		
Whetstone Lane	8		Woodland Road		
Whetstone View	1		Woodland Terrace	1	
White Street	4	2	Woodlands	7	1
Whitfield Place	1		Woodside Lairages		
Whitfield Street	4	1	Woodville Road	7	2
Whitford Road	5		Wordsworth Avenue		
Wilbraham Street			Wycliffe Street	2	1
Wilkinson Street	3	1	Wycherley Road	1	1
Wilks Court			Wye Street	2	
Willan Street			Yelverton Road		
Willaston Place	4		York Place (Balls' Road)		
William Street	10		Zetland Road		

SUPPLEMENT TO TABLE V.

RETURN OF DEATHS in Birkenhead Union Hospital and Workhouse during 1914.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
Jan. 3	M	66	Labourer.....	Senility	139 Back Price St.
5	M	72	Tailor	Epithelioma of tongue	37 Camden Street
5	M	25	Butcher	Pneumonia	23 Taylor Street
4	M	62	Shop manager	Bronchitis	44 Grange Road
5	F	54	Spinster	Bronchitis	155 Peel Street
7	M	27	Vanman	Pneumonia	4 Church Place
8	M	46	Barrister-at-Law	Pulmonary tuberculosis....	48 Haldane Avenue
8	F	19	Laundress	Rheumatic Fever	242 Price Street
9	F	41	Bootmaker's wife	Carcinoma of intestine	316 Beckwith Street
9	F	49	Carter's widow	Pernicious Anæmia	18 Oriel Road
11	F	41	Labourer's wife	Carcinoma of Uterus	15 Alison Street
13	M	72	Blacksmith	Senility	10 Sun Street
13	M	46	Ship plater	Lobar pneumonia	34 Thomas Streets
9	F	26	Labourer's wife	Pulmonary tuberculosis....	22 Oak Street
13	M	67	Carter	Capillary bronchitis	6 Eastham Street
14	F	25	Clerk's widow	Cerebral hæmorrhage	13 Massey Street
15	F	78	Storekeeper's widow	Senility	352A Price Street
16	F	83	Joiner's widow	Senile gangrene	Charlecombe Street
20	F	47	Labourer's widow	Bronchitis.....	7 Walton Street
21	M	68	Timber porter	Bronchorrhœa	32 Aspinall Street
20	M	66	Blacksmith	Arterio-Sclerosis.....	88 Russell Street
23	M	43	Coal carter	Fracture of right thigh bone	2 Abbey Terrace
20	F	64	Ship's stoker's widow	Valvular disease of Heart	37 Thomas Street
26	F	46	Labourer's wife	Valvular disease of heart ..	42 Queensbury Street
23	M	2	Labourer's son	General tuberculosis.....	2 Oak Street
29	M	37	Dock labourer	Pulmonary tuberculosis....	Birkenhead
29	M	39	Fitter's labourer	Mitral regurgitation	3 Davies Street
30	M	73	General labourer	Bronchitis.....	5F Queen's Buildings
30	F	30	Labourer's wife	Phthisis.....	12 Howard Street
Feb. 3	M	3 mos	Painter's son	Marasmus	11 Planet Street
3	F	39	Labourer's wife	Phthisis.....	6 Eldon Street
1	M	5	Labourer's son	Appendicitis	47 Church Street
3	M	54	Dock labourer	Bronchitis.....	11 Bridge Street
6	M	76	Labourer.....	Cardiac disease	6 Walker Place
11	F	66	Warehouseman's widow....	Bronchitis.....	1 Cumberland Place
11	M	30	Coal trimmer	Inflammation of Stomach ..	Birkenhead
15	M	33	Labourer.....	Pulmonary tuberculosis....	24 Queen's Place
15	F	52	Bricklayer's widow	Bronchitis.....	12 Myrtle Street
15	F	22 hr	Labourer's daughter	Premature birth	19 Hope Street
16	F	40	Labourer's wife	Lobar pneumonia	19 Hope Street
15	M	52	Labourer.....	Cerebral softening	3 Dacre Street
18	F	84	Gardener's widow	Senility	373 Brook Street
19	M	11	Servant's son	Pulmonary tuberculosis....	Birkenhead
20	M	2 mos	Marine Store dealer's son ..	Marasmus	56 Payson Street
21	M	75	Tailor	Cerebral hæmorrhage	27 Midland Street
23	M	71	Building surveyor.....	Bronchitis.....	39 Church Road

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
Feb. 25	F	34	Labourer's wife.....	Incomplete abortion	18 Stanley Court
25	F	15	Coal dealer's daughter	Septic Meningitis	35 Pleasant Street
26	F	79	Joiner's widow	Senility	178 Cloughton Road
28	M	66	Boilermaker	Carcinoma of jaw.....	2 Waterloo Place
28	F	54	Labourer's wife	Carcinoma of jaw.....	43 Ivy Street
28	F	54	Engineer's widow	Cerebral hæmorrhage	8 Green Lane
28	F	62	Ship fireman's widow	Acute Bronchitis	29 Thomas Street
27	M	54	General labourer	Cardiac degeneration	9 Albert Place
Mar. 2	M	71	Coal merchant's yardman ..	Mitral Regurgitation	11 Oliver Street
4	M	15	Labourer's son	Pulmonary tuberculosis...	56 Payson Street
7	F	33	Labourer's wife	Phthisis	32 Pensby Street
7	M	69	Freight clerk	Senile Decay	184 Beckwith Street
9	M	63	House painter	Mitral regurgitation	12 Russell Road
10	F	24	Spinster	Phthisis	13 Briardale Road
5	M	30mins	Servant's son.....	Prematurity	56 Mornington St.
13	F	43	Rivetter's wife	Mitral Regurgitation	36 Roslyn Street
11	F	20	Domestic servant	Pneumonia	56 Mornington St.
15	M	67	Labourer.....	Cystitis	53 Peel Street
15	M	47	Drayman	Chronic Nephritis	62 William Street
13	M	76	Labourer.....	Bronchitis.....	3 Tower Road
15	M	64	Engine fitter	Bronchitis.....	65 Grove Road
14	F	64	Labourer's widow	Cardiac degeneration	7 School Place
16	M	38	Labourer.....	Broncho-pneumonia	10 Waterloo Place
20	M	23 mos	Labourer's son	Congenital specific disease ..	23 Thomas Street
21	F	30	Labourer's wife	Mitral stenosis	25 Cleveland Avenue
24	F	59	Iron turner's wife.....	Mitral regurgitation	9 Bk Myrtle Street
23	M	65	Boilermaker	Senility	30 Queen's Buildings
25	F	1 mon	— daughter	Congenital specific disease..	19 Payson Street
24	M	1 mon	— son	Specific disease.....	22 Howson Street
25	F	71	Boilermaker's widow	Cerebral Thrombosis	2 Waterloo Place
26	M	62	Tailor	Bronchitis.....	1 Wirral Street
25	M	63	Labourer.....	Acute Bronchitis	222 St. Anne Street
25	M	42	Cotton porter	Mitral regurgitation	12f Queen's Buildings
19	M	48	Slater	Mitral regurgitation	44 Willmer Road
28	M	2 mos	— son	Tabes mesenterica	74 Raffles Road
31	F	51	Labourer's wife	Pulmonary tuberculosis...	50 Morpeth Buildings
31	F	81	Occupation unknown	Senility	88 Watson Street
April 2	M	6 mos	— son	Chicken-pox	16 Elmswood Road
3	M	37	Clerk	Disseminated Myelitis	207 Conway Street
4	F	63	Iron driller's wife	Cardiac failure	7 Nelson Street
5	M	60	Railway porter	Bronchitis.....	7 Jessamine Road
9	F	67	Labourer's wife	Diabetes Mellitus	3 Mason's Court
9	F	71	Master mariner's widow ..	Senile decay	53 Temple Road
9	F	43	Blacksmith's wife	Bronchitis.....	7A Oliver Street
12	F	79	Night watchman's wife ..	Bronchitis.....	10 White Street
11	M	54	Boilermaker's holder-up ..	Cerebral Hæmorrhage	42 Queensbury Street
13	M	74	Labourer.....	Myocardial degeneration ..	63 Old Chester Road
10	M	51	Labourer.....	Phthisis pulmonalis	146 Chester Street
14	F	73	Custom House officer's widw	Bronchitis.....	7 Well Lane

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
April 15	F	55	Traveller's wife.....	Diabetes Mellitus	27 Whitfield Street
16	F	35	Gentleman's wife	Tubercular meningitis	42 Rundle Street
15	M	82	Cattle dealer	Senility	13 Walker Street
17	M	45	Labourer.....	Duodenal ulcer	75 Market Street
17	F	46	Labourer's wife.....	Mitral regurgitation	81 Wood Street
20	M	10 mos	Labourer's son	Varicella	9 Planet Street
19	M	39	Plater's helper.....	Mitral disease	83 Peel Street
22	F	6 mos	— daughter	Varicella	25 Carnforth Street
22	F	7 mos	Charwoman's daughter	Varicella	2 Chapel Place
24	F	83	Boilermaker's widow	Broncho-pneumonia	7 Curzon Avenue
25	F	22	Labourer's daughter.....	Cerebral Hæmorrhage	24 Earl Street
30	M	37	Carter	Acute Pneumonia	15 Vincent Street
May 1	M	48	Labourer.....	Phthisis pulmonalis	Market Street
2	F	79	Labourer's widow	Senility	277 Lansdowne Road
May 3	M	66	Butcher.....	Arterio sclerosis.....	35 Portland Street
April 29	M	89	Labourer.....	Senility	6 Lowther Street
May 4	M	44	Labourer.....	Pulmonary tuberculosis....	3 Hind Street
2	M	66	Labourer.....	Chronic Bronchitis	2 Wilson Street
2	F	16 mos	Fireman's daughter	Varicella	11 Wilson Street
7	M	38	Labourer.....	Pulmonary tuberculosis....	108 Beckwith Street
8	M	51	Labourer.....	Ischio-Rectal abscess	10 Bentinck Street
11	M	57	Labourer.....	Mitral Regurgitation	146 Price Street
12	M	11 mos	Shunter's son	Septic Meningitis	108 Church Street
10	M	64	Labourer.....	Carcinoma of Oesophagus ..	43 Bk St. Anne St.
15	M	77	Blacksmith	Senile decay	23 Carlisle Street
17	M	71	Labourer.....	Senile decay	33 Gladstone Street
18	M	75	Shipwright	Myocardial degeneration ..	18 Stanley Street
16	M	48	Labourer.....	Carcinoma of Liver	32 Aspinall Street
16	M	19	Labourer.....	Septicæmia	4 Seabank Cottages
23	M	52	Rag gatherer	Mitral regurgitation	161 St. Anne Street
23	M	75	Plater's helper.....	Arterio sclerosis.....	10 Pitt Street
24	M	33	Labourer.....	Pulmonary tuberculosis....	37 Henry Street
20	M	11 mos	— son	Whooping cough.....	17 Lorn Street
26	F	38	Labourer's wife.....	Cerebral hæmorrhage	3 Priory Court
23	F	16	Labourer's daughter	Heart failure	5 Myrtle Court
27	M	49	Ship's steward.....	Pulmonary tuberculosis....	75 Market Street
31	F	68	Labourer's widow	Bronchitis	32 Stanley Road
30	M	61	File cutter	Old Hemiplegia.....	65 Old Chester Road
29	F	66	Gardener's wife	Heart failure	59 Abbey Street
30	F	58	Plasterer's widow	Empyema	207 Conway Street
June 2	M	28	Dock labourer	Lobar pneumonia	230 Brook Street
1	M	35	House painter	Pulmonary tuberculosis....	19 Thomas Street
6	M	83	Dock labourer	Myocardial degeneration ..	24 Oak Street
8	F	39	Boiler-scaler's wife	Pneumonia	32 Bertha Street
12	F	40	Coalheaver's wife	Puerperal septicæmia.....	18 Elmswood Road
13	M	76	Labourer.....	Senile Decay	43 Frederick Street
13	M	70	Railway porter	Lobar pneumonia	31 Camden Street
23	M	20 mos	Carter's son	Broncho pneumonia	115 St. Anne Street

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
June 18	F	19 mos	Labourer's daughter	Consumption of bowels ...	23 William Street
18	M	68	Labourer	Carcinoma Ventriculi	15 Priory Street
24	M	40	Iron glazer	Hæmorrhagic transverse ...	27 Sidney Buildings
26	F	51	Bricklayer's widow	Mitral regurgitation	48 Flamank Street
26	F	69	Caretaker's wife	Hemiplegia	6 Carlisle Street
27	F	16	Baker's daughter	Pulmonary tuberculosis....	40 Bridge Street
27	F	47	Labourer's widow	Chronic Nephritis	18 Flamank Street
27	M	57	Boilermaker	Broncho-pneumonia	14 Rodney Street
29	M	55	Cattle drover	Mitral regurgitation	35 Lord Street
26	F	78	Chimney sweep's widow ..	Senile decay	360 Brook Street
30	F	70	Able seaman's widow	Senile decay	56 Cathcart Street
28	M	63	Army pensioner	Myocarditis	4 Waterloo Place
July 1	F	63	Pilot's widow	Mitral regurgitation	12 Oak Street
2	F	55	Bootmaker's wife	Pulmonary tuberculosis....	23 Lees Avenue
5	M	14 mos	Plater's helper's son	Whooping cough.....	1 Hope Street
6	M	62	Labourer	Carbuncle of neck	7 Walton Street
7	F	79	Watchman's widow	Senile decay	18 Pitt Street
8	F	86	Railway goods checker ...	Broncho-pneumonia	124 Whetstone Lane
10	F	93	Ship carpenter's widow ...	Senile decay	23 Tunnel Road
13	M	51	Labourer	Cerebral Thrombosis	62 St. Paul's Road
14	M	74	Blacksmith	Carcinoma of Pancreas....	68 Beckwith Street
14	M	85	Marine engineer	Senile decay	83 Camden Street
15	M	76	Labourer	Carcinoma of Prostate ...	36 Flint Street
7	M	7 dys	— son	Spina Bifida	268 Cleveland Street
18	M	71	Tailor	Mitral regurgitation	15 Russell Place
21	F	47	Labourer's wife	Suppurative Cholangitis ..	36 Frederick Street
21	F	70	Waterman's widow	Chronic Bronchitis	25 Walker Street
22	F	64	Labourer's wife	Cerebral Embolism	4 Thomas Street
23	M	65	Blacksmith's striker	Carcinoma of stomach	168 Beckwith Street
27	F	52	Plumber's wife	Mitral regurgitation	14 Rose Street
28	F	54	Waterman's widow	Carcinoma of Cervix	10 Elgin Street
29	F	19	Driller's daughter	Mitral disease	20 Gladstone Street
28	M	52	Master fruiterer	Chorea	36 Elm Grove
Aug. 1	F	32	Gardener's wife	Pulmonary tuberculosis....	12 Anglesea Terrace
3	M	73	Ship painter	Mitral regurgitation	20 Albion Street
2	M	49	Ship fireman	Lobar Pneumonia	19 Flamank Street
7	M	63	Hand driller	Paralysis of insane.....	6 Abbey Terrace
8	F	71	Stonemason's widow	Senile decay	16 Derby Street
9	M	52	Fisherman	Mitral regurgitation	24 Grosvenor Street
7	F	68	Carpenter's widow	Carcinoma of Uteri	56 Flamank Street
10	M	44	Boilermaker	Ulcers of leg	140 Chester Street
11	M	43	Labourer	Lobar pneumonia	12 Brougham Street
11	F	76	Stone quarrier's widow ...	Broncho-Pneumonia	22K Queen's Buildings
11	M	33	Labourer	Abscess of Kidney	379 Brook Street
13	M	21	Boiler scaler	Lobar pneumonia	30 Abbot Street
14	F	40	Labourer's wife	Pulmonary tuberculosis....	8 Grace Street
10	F	51	General hawker	Pulmonary tuberculosis....	109 St. Anne Street
13	M	54	Ship rivetter	Fracture of Spine, etc. ...	1 Rose Place
18	F	84	Stonebreaker's wife	Senile decay	37 Field Street

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
Aug. 19	F	84	Bill poster's widow	Myocardial degeneration ..	3 Oak Street
24	M	56	Playground attendant	Cerebral hæmorrhage	8 Vine Street
27	M	68	Dock labourer	Senile dementia	49 Lord Street
28	M	22	Carter	Pulmonary tuberculosis....	4 Howe Street
26	M	65	Plumber	Septic cystitis	95 Oliver Street
29	M	14	Labourer's son	Lobar pneumonia	40 Flamank Street
Sept. 2	M	39	Joiner	Lobar pneumonia	18 Rodney Street
1	M	49	Dock labourer	Pulmonary tubereulosis....	45 Bk. St. Anne St.
2	F	23	Bootmaker's daughter	Mitral disease	32 Elgin Street
3	M	75	Engine fitter	Senile decay	49 Ivy Street
7	M	48	Labourer	Carcinoma of Pancreas ...	6 Church Terrace
11	M	43	Labourer	Pulmonary tuberculosis....	140 Chester Street
15	F	59	Labourer's wife	Cerebral Hæmorrhage	35 Field Street
16	M	52	Dock Labourer	Perforation of Bowel	105 Chester Street
18	M	55	Printer's compositor	Pulmonary tuberculosis....	4 Harriett Street
18	F	49	Spinster	Schirrus of breast	170 Bedford Road
20	M	21 mos	———— son	Tuberculous meningitis ...	37 Brunswick Street
24	M	3 mos	Labourer's son	Gastro intestinal atrophy ..	28 White Street
20	M	37	Dock labourer	Septicæmia	13 Morpeth Buildings
25	F	47	Milk salesman's wife	Morbus cordis	10 Tower Hill
24	F	33	Spinster	Mitral regurgitation	30 Eldon Place
24	F	79	Spinster	Epilepsy	3 Catherine Street
29	M	64	Labourer	Interstitial Nephritis	2 Milton Street
30	F	82	Labourer's widow	Bronchitis	108 Peel Street
26	M	63	Labourer	Senile decay	8 Cloughton Road
28	F	67	Lady's companion	Diabetes	2 Gothic Street
Oct. 1	F	66	Joiner's widow	Bronchitis	38 Yelverton Road
1	F	62	Boilermaker's widow	Pulmonary tuberculosis....	91 Queen's Buildings
5	M	51	Labourer	Carcinoma of prostate ...	8 Brimstage Street
6	F	68	Seaman's widow	Bronchitis	6 Waterloo Place
6	F	62	Boilermaker's widow	Bronchitis	21 Bk. St. Anne St.
8	M	33	House painter	Aortic regurgitation	24 Willmer Road
10	F	72	Dock gateman's widow	Sarcœna of breast	20 Derby Road
13	F	14	Labourer's daughter	Tuberculosis of lungs	10 Oliver Place
17	M	21	Ship's steward	Pulmonary tuberculosis....	20 Tower Hill
11	M	24	Ship's fireman	Pulmonary tuberculosis....	Birkenhead
14	F	70	Stonemason's widow	Hemiplegia	50 Chatham Road
15	M	49	Carter	Pulmonary tuberculosis....	24 Priory Street
19	F	28	Fireman's wife	Pulmonary tuberculosis....	85 Maybank Road
19	M	65	Slater, &c.	Arterio-sclerosis	11 Midland Street
19	M	46	Boilermaker	Mitral regurgitation	2 Ivy Street
21	M	86	Master boot repairer	Chronic Bronchitis	141 Cloughton Road
21	F	63	Labourer's wife	Bronchitis	9 Blucher Street
21	M	36	Ship's fireman	Broncho-pneumonia	123 Beckwith Street
24	F	72	Labourer's widow	Myocardial degeneration ..	31 Pitt Street
22	M	47	Shore donkeyman	Broncho-pneumonia	21 Aspinall Street
23	M	18 mos	Labourer's son	Tuberculous meningitis ...	214 Chester Street
26	M	55	Labourer	Cerebral hæmorrhage	31 Holt Hill
26	M	17	Boiler scaler	Valvular disease of heart ..	40 Pleasant Street

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
Oct. 23	F	87	Spinster	Mitral disease	53 Woodchurch Road
27	F	65	Doctor's widow	Hemiplegia	27 Woodville Road
27	M	4 mos	Soldier's son	Enteritis	14 Lorn Street
31	F	2 mos	Ship fireman's daughter	Congenital defects	12 Kimmel Street
Nov. 1	F	31	Boilermaker's widow	Lobar pneumonia	155 Bridge Street
3	M	76	Carter	Heart disease	305 Cleveland Street
3	F	70	Carter's widow	Cerebral hæmorrhage	24 Grosvenor Street
5	M	32	House painter	Pulmonary tuberculosis	15 Waterloo Place
7	F	77	Ship painter's widow	Chronic Bronchitis	29 Albion Street
7	M	23	Railway platelayer	Pulmonary tuberculosis	18B Queen's Buildings
5	M	27	Watchmaker	Fracture of Skull	32 Balls Road East
7	M	66	General labourer	Old hemiplegia, bronchitis ..	22 Church Street
10	M	54	General labourer	Lobar pneumonia	7 Meteor Street
7	F	78	Agricultural labourer's widow	Acute bronchitis	59 Oaktree Place
10	M	86	Timekeeper	Senile decay	226 Chester Street
12	M	48	General labourer	Aortic Mitral regurgitation ..	10 Monk Street
15	F	31	Dock labourer's wife	Carcinoma of Uterus	18 Bk. St. Anne Street
12	M	14 days	— son	Premature birth	12 Howard Street
17	M	94	Boilermaker	Arterio-sclerosis, Senility ..	41 Keightley Street
18	M	9	Soldier's son	Pulmonary tuberculosis	229 St. Anne Street
18	F	35	Carter's wife	Cerebral Thrombosis	7 Napier Street
18	F	57	General labourer's widow ..	Pulmonary Tuberculosis	76 Thomas Street
20	F	56	Dock labourer's widow	Heart disease	97 Brook Street
25	M	49	Dock labourer	Pulmonary tuberculosis	12 Brook Place
23	F	65	Spinster	Acute Bronchitis	16 Cross Street
13	M	33	Engine fitter's labourer	Fracture of skull	176 Brook Street
21	M	43	Seaman	Pulmonary tuberculosis	22 Church Street
28	M	36	Dock labourer	Pulmonary tuberculosis	11 Field Street
28	M	16	Soldier's son	Tuberculosis of Lung	2 Aberdeen Street
Dec. 2	F	74	Postal supt.'s widow	Chronic Bronchitis	41 Beech Road
2	M	24	Labourer	Lobar pneumonia	3 Austin Street
3	M	13	Deceased engine driver's son	Pulmonary tuberculosis	8 German Terrace
Nov. 26	M	19	Coal trimmer	Pulmonary tuberculosis	S.S. City of Lucknow
Dec. 7	F	16 mos	Shipyard labourer's daughter	Measles	24 Osmond Street
2	M	49	Dock labourer	Sarcoma of Neck	65 Wood Street
9	M	65	Sandwichman	Broncho-pneumonia	22 Church Street
10	F	74	General labourer's widow ..	Bronchitis, cardiac disease ..	6 Walker Place
11	F	2	Soldier's daughter	Whooping cough	46 Flamank Street
11	F	80	Tailor's widow	Chronic bronchitis	243 Brook Street
10	M	60	Gardener	Sarcoma of neck	11 Bridge Street
13	M	56	Shoeing smith	Hemiplegia, cardiac failure ..	11 Bridge Street
12	M	2	Soldier's son	Measles, Broncho-pneumonia ..	22 Eldon Street
13	M	27	Municipal clerk	Cerebral hæmorrhage	16 Rosedale Road
14	F	20 mos	Dock labourer's daughter ..	Whooping cough	55 Flaxhall Street
15	M	41	Teamowner's carter	Acute bronchitis	15 Vulcan Street
15	M	45	Hairdresser	Carcinoma of liver	2 Watson Street
15	F	33	Soldier's wife	Tuberculosis of lung	2 in 23 Fox Street
16	M	63	Master slater	Gastro enteritis	51 Vulcan Street

SUPPLEMENT TO TABLE V.—Continued.

Date	Sex	Age	Occupation, &c.	Cause of Death.	Address of Deceased when admitted.
1914					
Dec. 11	F	74	Mechanic's widow.....	Arterial sclerosis	17 Cardigan Street
11	F	77	Monthly nurse.....	Arterial sclerosis	10 Oliver Place
20	M	66	General labourer.....	Carcinoma of Caecum	2 Berry Street
22	M	55	Travelling showman	Cerebral hæmorrhage.....	Caravan, Cleveland St
22	F	50	Master Pork butcher's wife..	Phthisis.....	202 Beckwith Street
22	F	60	Spinster, charwoman	Lobar pneumonia	31 Henry Street
22	M	70	Ship rigger	Acute bronchitis	9 Dover Street
23	F	4	Dock labourer's daughter ..	Measles	34c Queen's Buildings
23	M	58	General labourer.....	Bronchitis, pneumonia	422 Price Street
23	F	5	Dock labourer's daughter ..	Measles	55 Flamank Street
23	F	2	Dock labourer's daughter...	Measles	12 Flamank Street
26	M	53	River waterman	Disseminated sclerosis	35 Cobden Street
24	F	65	Cotton porter's widow	Bronchitis.....	33 Grange Rd. West
28	M	11	House painter's son	Tubercular meningitis	8 Coventry Street
28	M	21	General labourer.....	Phthisis.....	32 Leicester Street
31	F	20 mos	Hairdresser's daughter	Septic gingivitis	9 Sun Street

